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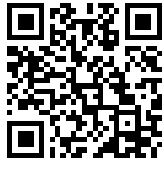
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THE

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A RECORD OF MOUNTAIN ADVENTURE

AND

SCIENTIFIC OBSERVATION

BY MEMBERS OF THE ALPINE CLUB

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1920 AND 1921

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THE

ALPINE JOURNAL.

MARCH 1920.

(No. 220.)

Discours de M. le Baron Gabet, Président du Club Alpin Français.

Au Banquet Annuel de l'Alpine Club.

My Lords and Good Friends :

Votre éminent Président, le Capitaine Farrar, m'a déjà fait, depuis mon arrivée à Londres, la plus agréable démonstration de la courtoisie tout à fait charmante avec laquelle on sait pratiquer l'hospitalité en Angleterre. J'apprécie au plus haut point cette si bonne et si affable cordialité.

J'éprouve une grande émotion du chaleureux toast que M. Freshfield vient de porter au Club Alpin Français ; de telles paroles venant d'une si grande personnalité de l'Alpinisme, de celui qui en est la représentation même, ont vraiment une très grande valeur.

Vous êtes le plus ancien des Clubs Alpins et, soixante ans après votre fondation, toujours plus vivant, toujours plus actif. Vous avez été les véritables pionniers pour explorer les Alpes Françaises, la Savoie, le Dauphiné, les montagnes et les vallées de la Suisse.

Et puis, vous êtes partis à la découverte des sommets du monde entier. Vous avez été les initiateurs, les professeurs, les maîtres de l'Alpinisme ; vous êtes restés une sélection de grimpeurs émérités. Vos plus illustres ont consacré leur vie à l'exploration des hauts sommets.

Vous avez révélé l'amour de la montagne, les plaisirs de l'escalade, l'endurance, la résistance, le goût de l'effort, la joie de la conquête des cimes nouvelles et toute l'intensité des sensations et des sentiments éprouvés.

Et nous, alpinistes français, vos élèves, nous sommes avec

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vous pour aimer et admirer les grands monts qui donnent l'excitement d'une jouissance intensive, qui nous rendent meilleurs, plus vaillants, plus forts, qui nous transportent plus haut avec des cœurs plus chauds, des âmes plus ardentes.

Le Club Alpin Français, arrivé plus tard que vous dans la carrière, a voulu, après la guerre de 1870, former une jeunesse française plus forte par la pratique de l'Alpinisme. Nous avons marché avec notre devise, '*Pour la Patrie par la Montagne,*' pour relever notre patrie meurtrie. C'est ainsi qu'ont été formés les bataillons de Chasseurs Alpins qui sont devenus les vaillants entre les vaillants.

Nous préparions la résistance.

Brusquement, le grand vent de la terrible tempête s'est levé le 1er Août 1914 ; le tocsin a sonné dans les villes et dans les campagnes. Les ouvriers ont abandonné l'usine, les paysans ont abandonné la charrue, et tous ont accouru, laissant tout pour sauver la Patrie en danger.

Alors, notre grand mérite à nous, Club Alpin Français, c'est le courage des nôtres, toujours héroïques dans la grande guerre, c'est d'avoir obtenu le maximum de la proportion des morts au champ d'honneur, au milieu des 1,500,000 morts des armées françaises. Ces glorieux sont tombés pour la liberté du monde !

C'est donc d'un même élan avec vous, Grande Bretagne, Ecosse, Canada, Australie, Nouvelle-Zélande, Indes, Afrique du Sud, que nous avons résisté au choc ces Barbares, que nous avons reculé deux fois, mais reculé sans défaillance et toujours confiants et courageux, que nous avons tenu bravement, avec ténacité, dans la trancheé pendant si longtemps ; et, enfin, apres quatre années de luttes héroïques, nous avons eu, ensemble, la grande victoire, la victoire décisive.

Entre nos deux nations, entre nos peuples, *la Cordiale Amitié est maintenant scellée pour toujours.*

Je termine en adressant encore mes bien vifs remerciements à l'Alpine Club et à son éminent Président, le Capitaine J. P. Farrar pour leur chaleureux accueil.

The Baron was received, both on rising and at the end of his eloquent speech, with a storm of applause, the whole company rising ; and the cheering was again renewed when, at the end of the speech of the Lord Chancellor, Baron Gabet stepped forward and vigorously shook him by the hand, in recognition of his sympathetic allusions to the splendid object lesson offered by France to the world, and to the feelings of admiration and warm regard existing in this country towards the sister nation.

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Valedictory Address.

By J. P. FARRAR, President of the Alpine Club.

SIX years ago, Sir Edward Davidson told us how these triennial inflictions of an address to the Club arose.

Now two of the three years of my Presidency from a mountaineering point of view have been almost barren, and the third permitted only a scant revival of active mountaineering.

You will thus be prepared for a very prosaic address from me. You cannot well expect from me great literary landmarks like some addresses of my predecessors.

The attendances at our meetings, among other signs, convince me that the Club's interest in our pursuit is as keen as ever, and that the repression of the last six years will be followed by an outburst of great mountaineering energy.

With respect to the internal affairs of the Club, we started the first year of my term (1917) with 658 members. We expect to start next year with 642.

It is a great satisfaction to see that we have still with us two members of 60 years' standing: Professor Bonney and Sir James Ramsay of Bamff, who opened the Midi route nearly 65 years ago; while four—Mr. Edward Buxton, Mr. Blanford, Mr. Hawkshaw, and Father J. K. Stone—have been members for 59 years.

We have actually 30 members of 50 years' standing or more, but Mr. Freshfield's 55 years of membership surely indicate a remarkable degree of precocity.

Our financial position at the end of 1918, the last year for which full figures are available, was very sound, and the estimates for 1919 leave no cause for any anxiety.

This position is due in a great measure to the self-sacrifice of my good friend Charles Wollaston, who has served under three Presidents with masterly tact, or shall I say with tactful mastery?

Unfortunately we have lost by death many members. Losses up to the date of the last meeting have been mentioned from the Chair, and recorded in the obituary notices in the Journal.

First and foremost stands Charles Pilkington, of whom I had the honour to speak at the February meeting. His place among us will always be kept.

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In Frederick Gardiner, who speedily followed his comrade, the Club lost a most indefatigable mountaineer, of whom his companion, Lawrence Pilkington, has written a sympathetic notice for the JOURNAL.

Our losses further included pioneers like Liveing and Woodmass and Rivington—men of science like De Candolle and Hopkinson—explorers like W. Spotswood Green—Philpott, the survivor of the famous partnership of Hornby, Philpott, and Almer — Roosevelt, the sometime U.S. President, great-hearted in whatever he did.

The loss of these men must be expected by a veteran Club like ours and borne with resignation.

But there are losses of a different kind. The Club mourns with proud regret its sons fallen in battle in the full strength of manhood. I mention only the losses of the Presidential period: Gerald Arbuthnot, H. O. S. Gibson, Cyril Hartree, Charlie Inglis Clark, R. E. Thompson, T. E. Goodeve, Nevile Done, whose clear and energetic voice I still seem to hear as almost six years ago to-night he thanked the then retiring President. Others, Bertram Hopkinson, Russell Clarke, and Henri Duhamel, veteran of 1870, volunteer of 1914, equally gave their lives for their country even if not actually in battle.

The Journal has paid tribute to their memories. The Club will not forget. But our tale of losses is not yet told.

In John Herbert Wicks, the Club loses a distinguished member. His mountaineering record is so well known to every man here that I need not dwell on it.

I well remember that his election to Committee in 1891 was accepted with peculiar satisfaction by the hard-climbing members of the day. We looked on him as our particular Committee man, and he remained to the end a type of English climber of whom we were proud. He was essentially a strong man, silent, sagacious in council, steadfast in danger, uncomplaining in defeat, of great endurance, sound in knowledge capable in execution—a staunch friend said, if needs be, to be a fearless opponent.

A picturesque figure is lost to us in the Rev. Florence Thomas Wethered, elected in 1873. In his time a very active mountaineer, good enough with old Papa Almer to descend the N. face of the Mönch—he remained to the end the most enthusiastic of my correspondents. Scarce a week passed without bringing me an epistle bubbling over with delightful energy. There has been no truer son of the Club.

We have lost in Mr. John Stogdon a member elected in

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1869. His delightful 'Random Memories,' which appeared in the JOURNAL a little over two years ago, revealed to us the man, old in years if you like, but full of the splendid fervour of youth, revelling in memories of many a glorious day on the great mountains. It was a privilege to know and to see him in his own family and surroundings, as I did when I went over to Harrow about the paper. I feel that he died game and young in heart as ever—feelings and sympathies always keen. To Mrs. Stogdon, as keen and responsive as he was himself, we offer our respectful sympathy.

Lt.-Col. Sir Henry Trotter, elected in 1875, served originally on the Great Indian Survey, and had travelled in Turkestan and the Near East. He saw service with the Turkish Army in Asia Minor in the 1877 campaign, and was often employed by our own Government on missions of much responsibility.

Mr. F. W. Headley, elected in 1882, was a Haileybury master, and, like many of his profession, an ardent mountaineer. In 1910 many of us can recall his reading a very interesting paper on the 'Birds of the Alps.'

Mr. Larden, elected in 1886, best known by his monograph on the Arolla climbs, was not by any means a centrist. He had visited other parts of the Alps, and, in 1909, the Tupungato district in the Andes. He was likewise the author of a book of his Alpine journeys, and of a monograph on the inscriptions on Swiss chalets.

In Canon Henry Martin, elected in 1896, we lost an ardent lover of the mountains. His life's work was done as Principal of Winchester Diocesan Training College, which post he held for 34 years, but in many other capacities he rendered splendid service to the community.

We have also lost a distinguished Honorary Member, Dr. Moreno, the well-known Argentine traveller and scientist. He was the founder and for many years director of the La Plata Museum, and rendered signal service to his country as High Commissioner in the Boundary delimitation with Chili.

We have lost three great guides, Peter Knubel, Christian Jossi, and Johann Köderbacher, to whom tribute has been paid in the JOURNAL.

If we have lost all these old friends, I feel sure the Club may at least claim one potential member. Surely in the vigorous, if youthful, son of Geoffrey and Eleanor Young, grandson of Sir George Young and of William Cecil Slingsby, we may look forward, if breed counts, to an altogether transcendental mountaineer.

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The Club learned with regret that Ulrich Almer, worthy son of a valiant father, had, in his old age, fallen on evil days. It is not the habit of this Club to neglect men who have served them well. A fund was immediately got together which ought to suffice to make Almer an allowance sufficient for the rest of his life.

During the period under review, MM. Ferrand, le Chevalier de Cessole, Puiseux, Martel, le Colonel Godefroy, distinguished French mountaineers, and MM. Paul Montandon and Julien Gallet, the well-known Swiss mountaineers, accepted Honorary Membership of this Club, while the French and Italian Clubs have been good enough to enter several of us among their Honorary Members. We value the honour as a proof of solidarity which we will leave nothing undone to foster.

M. le Baron Gabet, President of the C.A.F., whom we have the honour to welcome to-night, has very courteously intimated on behalf of his Club their desire to bring together our two Clubs, and to strengthen the claims of mountaineering in France, by electing to their Club any members of ours. The last act of my office will be to issue a circular inviting you to take advantage of this offer.

Major Morrison-Bell told us from this place of his brilliant Zermatt season; and I come now to the principal ascents of the year 1919.

Mr. R. W. Lloyd, led by Joseph Pollinger, ascended the steep N.N.W. ice slopes of the Col de Bionnassay, thus completing this Col. He also ascended the Cervin by the Galerie, of which he speaks with enthusiasm, and descended by the Zmutt—a new combination.

Messrs. Mallory and H. E. L. Porter made a new ascent of the Aig. du Midi from the N. side by what was mainly an arête route. They were much aided by crampons, and state that the route is absolutely sound, as indeed the marked photograph which will appear in the ALPINE JOURNAL shows it to be. Previous routes on this face have been unsatisfactory, and the new route reflects credit on the climbers' judgment.

The same party ascended the Grands Charmoz from the glacier de Trélaporte—'a very stiff rock climb and quite dramatic in its manner'—so Mallory writes, and those of us who have climbed with, or in my case, I should say *below*, Mallory, will appreciate what he calls 'very stiff.' The ascent was a variation—probably an improvement—on the Thorold-Pollinger ascent of 1899, and of the Fontaine-Ravanel descent

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of 1902. Pollinger reported stone fall, whereas Mallory's party kept mainly on a rib on the upper part of the face, and thus avoided any danger from stones.

It is a peculiar satisfaction that climbs of this importance have been carried through by two of our younger men without assistance.

Our Honorary Member, M. Paul Montandon, repeated Mr. Young's route over the Rothe Zähne of the Gspaltenhorn, and writes in most enthusiastic terms of its delights. The words 'I know of no other climb, not even in the Dolomites, resembling this one,' from a man of his wide experience mean much.

He and Knubel traversed the Cervin by the Zmutt, the Gabelhorn-Wellenkuppe and ascended the Täschhorn and the Nordend. He *says* he is over 60, so there is still hope, or possibly despair, for some of us.

Mr. Raeburn, another veteran in years, is going as strong as ever. Unable to find a companion, he traversed the Meije *alone*. I shall not presume to criticise his succumbing to the fascination of an occasional solitary climb. He is a competent judge of his own powers. At the same time, only *Raeburns* had better follow his example.

Captain George Finch, in the absence of his brother Maxwell with his battery in Constantinople, suffered from strange companions, but made a new route to the glacier on the W. face of the Nordend, which peak he traversed to the Silbersattel. He ascended the Dent d'Hérens by the N.W. arête, not often done, although opened nearly 40 years ago.

The eminent Italian mountaineers, the brothers Gugliermina have made a new ascent of the S.W. face of Lyskamm. The route lies between the arêtes Perazzi and del Naso, and strikes the summit itself. A route up the S. face of the W. Lyskamm was made by Signor Ravelli and some other Italian climbers.

The most interesting expedition of the year is the ascent of the face of M. Blanc de Courmayeur contained between the Peuteret and Brouillard arêtes, done by Messrs. Courtauld and Oliver—two of the strongest and most capable of our young men—with a strong guide contingent, Henri and Adolphe Rey and young Adolf Aufdenblatten of Zermatt.

H. O. Jones, after his great campaign of 1911, brought home the first detailed photo of the face taken from the Innominata. This appeared in the ALPINE JOURNAL, vol. xxvi. It was quite obvious that there was a route up this face, and from that time it became a subject of confidential discussion in high

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mountaineering circles. Interest in it was stimulated further when the possible route was referred to in the unsigned masterly annual review of the mountaineering season, which the *Times* used to publish, and which I hope to see entrusted once more to the same able hands.

Its history dates back to at least 1874, as in that year Mr. T. S. Kennedy and Mr. Garth Marshall, with Johann Fischer and Hans Jaun, two able guides, made an attempt on this face or possibly on the Broglia arête; while a month later Mr. Marshall and Fischer were killed on the Broglia Glacier, as they were returning from a renewed attempt, or reconnaisance, Ulrich Almer alone escaping.

My good friend, Joseph Gugliermina, writes to me that he and his brother Baptiste, the great authorities on the Italian face of Mont Blanc, have for some years had in view a route up this face from the Fresnay arête, and reconnoitred it in 1915 and 1916, reaching in the latter year a height on it well above the level of the Aig. Blanche, when the time of day and threatening weather compelled their retreat. Last summer, with their friend François Ravelli, they again reached the higher end of the Fresnay arête where it abuts against the face, but did not feel justified in going on, owing to stones falling.

Our men in more favourable conditions started from the Col de Fresnay, and saw no stones. The arête up which they started ran out high up in the face, and they were compelled to traverse to another arête, and so eventually gained the great main Brouillard arête which they followed for 40 minutes to the summit of M. Blanc de Courmayeur.

The next climbers might try either to reach the summit direct (which, however, I think is not possible, as even the Peuteret arête reaches it a few yards on the Brouillard arête side), or to gain the latter arête at possibly a higher point.

Other climbs that were made by foreign climbers, and which only nearly a month of perfect weather rendered possible, are:—

From a bivouac on the Mischabeljoch the traverse of the Täschhorn, Dom, Südlenzspitze and Nadelhorn to the Mischabel hut. The porters, before starting back from the Mischabeljoch with the sleeping kit, amused themselves by strolling up the Täschhorn in 3 hours. From the Trift the young guide Perren, with a traveller, made the ascent of the Rothhorn, whence the whole arête over the Trifthorn, Wellenkuppe and Gabelhorn was followed to the Arbenjoch and Zermatt.

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The coiffeur at Saas Fee amused himself by ascending Fletschhorn and traversing Laquinhorn and Weissmies to Almagel.

I understand that H.M. the King of the Belgians, whom we are proud to number among our Honorary Members, showed in a short but arduous climbing campaign that the strain of over four years' war has not subdued his mountaineering ardour.

Two years ago we all heard with profound sympathy of the grievous affliction that had befallen on active service one of the most brilliant members of this Club. I mean, of course, Geoffrey Young. But he is quite undefeatable. He has been doing hard climbs in Wales and even harder in Cumberland, N. face of Pillar, 11 hours from Buttermere and back, the *A* buttress on Gimmer Crag, and other ascents. All he remarks is 'The screes etc. stay rather strenuous.' I understand the French Government have made him recently a Chevalier of the Legion of Honour, while the Italian Government have nominated him Cavaliero of the Corona d'Italia—well-earned honours.

The only great climb by an English*woman* of which I have heard is Miss Pickford's traverse of the Charmoz with Pollinger. She also did the Tacul. We, of course, look upon her as quite one of ourselves.

I do not think I need mention any other climbs. There have been no accidents to any of our people.

One of the best of the Swiss climbers, Herr Karl Steiner, and Herr Michel, were killed by lightning on the Scerscen-Bernina arête; a young Frenchman and two good Chamonix guides, Clément Payot and Jean Ducroz, were killed on the Aig. Verte. They seem to have found in the great couloir a thin layer of bad snow on ice which balled under their crampons. They fell about 1200 feet, and were found in the *rimaie* at the foot of the slope.

Two Swiss climbers slipped on the descent of the W. arête of Bietschhorn when turning by a snow slope one of the towers, and, unable to stop themselves, were picked up on the Bietschthal side, dead.

Herr Gustav Jahn, a well-known artist and one of the ablest of the Austrian climbers, and Herr M. Kofler were killed when attempting the very difficult N.W. arête of the Ödstein in the so-called Gesäuse in Styria, a favourite haunt of the Viennese. A glowing tribute to his memory from Herr Pichl appears in the *Ö.A.Z.* Jahn, with all the experience and strength of his 40 years, was a thoroughly capable leader,

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and the accident only serves to remind us that even the very best mountaineer frequently takes his life in his hand.

S^{t}. Fadana and Gamma, both experienced climbers, were lost when ascending the N. arête of the Grivola. A snowstorm overtook them at night and no trace of them was found until some time later.

As to the JOURNAL I must leave it to others to say whether it has maintained its position in the conditions due to the war.

On behalf of the Club I venture to offer thanks to Professor Bonney and to Sir Martin Conway for delightful reminiscences, as well as to several other willing helpers.

One announcement I make with the most complete satisfaction. Mr. Yeld has now served as Editor for 24 years, covering 15 volumes. He has deserved well of the Club. The Committee, anxious to find some special way of marking the obligation under which his labours have put us, decided to offer him the distinction of Honorary Member. It is not likely to become a precedent, since there is only one Yeld. I hope he will continue to give the Club the benefit of his guidance and experience.

Of Mr. Montagnier's services to the JOURNAL, I cannot say enough. He has got together from all kinds of sources, at great personal labour and through the good offices of Dr. Alexander Seiler and others, the original records of many important ascents, which were in great danger of perishing.

He has also acquired for the Club a series of Führerbücher of old guides, which are again original records of the highest value—the Bibles of our pursuit, as my enthusiastic friend, the late Mr. Wethered, called them. He has repeatedly presented to the Club books and documents of great value.

He has brought over for presentation to the Club the *Gazette de Lausanne* for 1786 to 1787, in which the interesting correspondence between Bourrit and others dealing with the first ascent of Mont Blanc appeared.

Without his splendid help we could not have kept the JOURNAL going. Moreover, his unflagging and enthusiastic diligence spurred me, who am prone to idleness, into fairly continuous work.

Though absent from its councils, he is ever eager in the service of the Club.

M. Paul Montandon has always placed his great Alpine knowledge at the disposal of the JOURNAL. I am indebted to him for photographs and much assistance.

Whereas in 1917 we published a volume of 373 pages, we

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were compelled by the enormous increase in cost to issue only two numbers in 1918, and one number in 1919, making a volume of about 420 pages for the two years.

So long as present prices obtain, I think we must be content with one number a year. High prices naturally mean decreased demand. The Editors, with the willing aid available, can find material enough for more, but the old size of JOURNAL would mean an increase in the members' subscription. We are doubling the price to non-members.

An expression of opinion as to the future of the JOURNAL would be a useful indication to the Committee and Editors.

Alpine books have been few.

Canon Durham has written an animated account of his Alpine journeys. Mr. Weston's 'Playground of the Far East' takes us to the Japanese Alps, which he did so much to make into a playground for their own people. Dr. and Mrs. Workman have carried out a survey of the Siachen Glacier and recorded their expedition in a volume which I reviewed at length in the Journal. We are awaiting with keenest interest Mr. Freshfield's 'Life of De Saussure.'

Dr. Dübi is editing an amplified translation of the Pennine volumes of the 'Climbers' Guides.'

The volume from the Théodule to the Simplon has appeared in French and German, and the remaining volume is well advanced. Any helpful criticism of these is very welcome in view of revised editions.

It is interesting to note that many glaciers are in active advance. At Saas Fee hundreds of trees have had to be cut down, while at Grindelwald barns have been upset and pasture ploughed up by the invading ice.

As to the future of mountaineering, we must expect and ought to encourage independent climbing. This Club has tended to insist that enterprise should wait on experience, as I consider, *over* long. Experience is a bad *substitute* for enterprise. We have been unwilling, or have failed, to recognise the school our Welsh and Scotch and English mountains offer to our young men to overcome their *mountain shyness*, and to learn what can be done in rock-climbing and route-finding. A young man well schooled over here will approach any Alpine problem in a very different manner from what we did 40 years ago. Ice-work, which may be said to be the intellectual side of mountaineering, can only be learned in the Alps, but his apprenticeship to rock-work and route-finding will serve him in good stead when he goes to the Alps.

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My good comrade Herbert Reade, in an able article in the *Climbers' Club Journal,* has pointed out the pitfalls and differences a young British-trained climber must expect to find on visiting the Alps. He has emphasised that while sureness of foot and a certain degree of technique may be learned at home, the *art* of mountaineering can only be *mastered* by continuous work under high mountain conditions and competent masters. There is no man more qualified to speak on this subject than one who once implied that he was my *sorely tried* comrade!

We cannot ignore the fact that mountaineering as practised with the *full* approval of this Club has remained in leading strings longer than any other hard pursuit followed by active Englishmen. Good feeling towards a particular guide, or the difficulty of finding a companion of like powers, tastes, and better temper, has had much to do with this result. But this Club is getting old. We must study youth. Caution can be overdone. We must search out, encourage, and bring on young men—into the Club, on to the Committee—I have done what I could in the latter respect. I recommend my successor to do more. We have great traditions, a great past—look to it that we also have a great future—and *that* you cannot have if a majority of our candidates are already men of mature age.

Moreover, the great increase in guides' tariffs and travelling expenses will tend more and more to enforce guideless climbing, since our incomes by no means tend to increase proportionately. There must be no disapproving looks on our side.

There is some talk of an expedition to Mt. Everest, in which the R.G.S. are taking a leading part, no doubt in a measure through the suggestions of a most distinguished predecessor of mine whom we lent them for a season. The Club will give such an expedition every support in its power, and I trust there may be some young men among us able to take part.

We are meantime waiting until the Indian Government is rid of its frontier troubles, as, of course, their approval and material support are indispensable. The altitude record stands, I think, at 24,600 feet, and it is a very rash man who, with the facilities of transport of impedimenta and reconnoitring offered by small airships, will deny the possibility of overcoming the remaining 5000 feet.

It is to be hoped that the Swiss authorities will do what they can, and more than they did, to render the visit of English travellers to their country as free from formalities as possible.

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The last five years have drawn the Allies very close together. It is not to be expected that we shall be prepared to enter into relations with the German Alpine Clubs, or to meet, except purely formally, German climbers. Tirolese and Austrians are on a somewhat different footing, as Englishmen with memories of many courtesies can hardly help showing.

I hope my eminent immediate predecessor will permit me to express the Club's supreme satisfaction at his appointment as Master of the Rolls. The whole country rates him high, but no higher than we do.

We are all much pleased that the S.M.C. is to have for its next President one of the best of good fellows and mountaineers —my very good friend Ling.

Gentlemen—I put off to-morrow my high estate. I am proud to have been President, by your favour, of this great Club.

You have, by your sympathy, made my position a delightful one. To many members of the Committee I am much indebted for sound advice and gentle application of the brake on what, age notwithstanding, I fear is a somewhat impetuous nature.

To you all I offer my very grateful thanks.

Narratives of an Ascent of Mont Blanc in 1819.

By Jeremiah van Rensselaer and William Howard.

With a Note by Henry F. Montagnier.

THE two papers reprinted here are undoubtedly the rarest of the seventeen narratives of ascents of Mont Blanc printed by English-speaking travellers during the first half of the last century. They are not even to be found in the remarkably rich collection of works on early mountaineering in the Library of the Alpine Club, and at the present time probably not a score of our members have ever seen them. Yet these two little pamphlets hold an almost unique place in the literature of our pastime. For, with the one exception of Beaufoy's paper on his ascent of Mont Blanc (read before the Royal Society in 1787, but not published until 1817), which Mr. Freshfield reprinted in this Journal a few years ago (vol. xxix. pp. 323–333), they are the earliest accounts of the ascent of an Alpine snow-peak originally written in our language;

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indeed, it may be said without exaggeration that their publication marks the beginning of English Alpine literature.

The authors were two young American physicians, aged twenty-six and twenty-five respectively, who, after taking their medical degrees in the United States, had set out for a two years' visit to England and the Continent.

Dr. Jeremiah Van Rensselaer was born in Greenbush, Rensselaer County, in the State of New York on August 4, 1793. He was a descendant of a celebrated family of Dutch settlers who founded in 1637 the colony of Rensselaerwick on the Hudson, and who for nearly three centuries have played a prominent rôle in American social and public life. After graduating from Yale in the class of 1813, he took his medical degree in the University of New York in 1817, and continued his studies two years in the schools and hospitals of Edinburgh, London, and Paris, returning to New York in 1820 to take up the practice of his profession. For many years he was corresponding secretary of the New York Lyceum of Natural History, and in 1825 he published a treatise on geology which was highly esteemed in its time. In 1851, after a brilliant career of nearly thirty-two years, he gave up his professional work and retired to his estate on the Hudson, where, with the exception of a few years passed in Continental travel, he resided during the remainder of his life. He died on February 7, 1871, in the seventy-eighth year of his age, nearly fifty-two years after his memorable ascent of Mont Blanc.

According to the American *Medical Record* of April 1, 1871, Dr. Van Rensselaer was 'a polished and elegant scholar, a beloved physician, an upright citizen, a Christian gentleman, a man of honour and of noble aspirations.'

Dr. William Howard was born in Baltimore, in the State of Maryland in 1794. He took his medical degree in the University of Maryland in 1817, and after two years passed in study abroad returned to that institution as assistant professor of Natural Philosophy. A few years later he resigned this position in order to enter the service of the American Government as topographical engineer. He is said to have taken out the first patent in the United States for a locomotive. He died in 1834 at the early age of forty.[1]

If we include Dr. Paccard in the list, Van Rensselaer and

[1] I am indebted for the above biographical details to the courtesy of my fellow-countrymen, Mr. Henry G. Bryant and Mr. Le Roy Jeffers, of the American Alpine Club.

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Howard with their nine guides were the eighth party, excepting those composed only of Chamonix peasants, to attain the summit of Mont Blanc; the previous ascents having been effected in 1786 (Dr. Paccard), 1787 (De Saussure, followed a few days later by Beaufoy), 1788 (Woodley), 1802 (Dorthesen and Forneret), 1812 (Rodatz), and 1817 (Matzewsky). The leader of their expedition was the celebrated Joseph-Marie Couttet, the 'Capitaine du Mont Blanc,' who, although then only twenty-seven years of age, was already the most experienced and competent of the younger generation of Chamonix guides. The following year he was the leader of Dr. Hamel's ill-fated attempt on Mont Blanc, and his last ascent was made with Mr. J. D. Gardner's party in 1850. As he was still living in 1874, it is quite possible that a few of our older members who visited the Chamonix valley in the early seventies may still remember him.

It is interesting to read in their narratives that our travellers called on Dr. Paccard, who was still flourishing thirty-three years after his great ascent; and that Jacques Balmat accompanied them as far as the edge of the glacier. In his manuscript Journal, which is now one of the treasures of the Alpine Club Library, Paccard records their expedition as follows:—

> 'Dimanche 11 juillet 1819 deux américains avec neuf guides sont allés coucher aux grands mulets. Arrivés le lendemain au sommet du Mont-blanc à midi 20. Descendus à la montagne de la côte le même jour. Ils ont cassé mon thermomètre. C'étoit Mr. William Howard de Baltimore et le Dr. Vanranselaer de New York des états d'Amérique.'

The worthy doctor was misinformed, however, for by their own account the two climbers passed their second night out on the Grands Mulets, and as they ascended by the Pierre Pointue it would seem likely that they returned to Chamonix by the same route.

Van Rensselaer and Howard both seem to have had a little of the climbing instinct, for Howard refers to his 'clambering disposition' which had already led him to the summits of Etna and Vesuvius; and Van Rensselaer tells us that he had made several ascents in the Apennines. Nevertheless they do not seem to have found the ascent of Mont Blanc a particularly agreeable experience; in fact, Howard admits quite frankly that he felt no desire to embark upon a similar adventure in the future. And most of the travellers who followed

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in their footsteps during the ensuing thirty years found that one expedition above the snow-line was quite enough to satisfy their curiosity for the rest of their lives. Their attitude is well described in the amusing lines quoted, and, I suspect, written, by Albert Smith in 1841 :—

> 'Full forty gentlemen, wealthy and bold,
> Have climbed up in spite of the labour and cold ;
> But of all that number there lives not one
> Who speaks of the journey as very good fun.' [2]

As a matter of fact, it is not until the latter fifties, when the founders of the Alpine Club appeared on the scene, that we find the ascent first described as really enjoyable sport. Clissold (1822), who made one of the most daring ascents of early times, says 'the coldness, fatigue, little rest for two nights, and that state of equanimity which had been requisite in surmounting so many dangers, rendered us incapable of fully enjoying the grandeur which was now displayed before us.' Captain Markham Sherwill (1825) advised his friends strongly not to undertake the journey to the summit. Auldjo (1827) says : 'I was exhausted ; the sensation of weakness in the legs had become excessive : I was nearly choking from the dryness of my throat and the difficulty of breathing ; and my head was almost bursting with pain.' Wilbraham (1830) tells of the 'apathy and indifference' he felt on attaining the highest point. And in 1851 Albert Smith reached the top 'completely done up.' 'I was stumbling about,' he says, 'as though completely intoxicated, and planted my feet anywhere but in the right place.... I was so completely exhausted that, without looking around me, I fell down upon the snow and was asleep in an instant.'

Let us turn now to a narrative of the ascent of Mont Blanc in 1857 written by one of the fathers of the Alpine Club. In answer to the question 'Did the ascent repay you?' Mr. Hinchliff exclaims : 'To ask such a question of a true mountaineer is simply to insult him as completely as we should insult a pious man by asking him whether, after all, he really thought it worth while to go to heaven. Repay? Repay for what? We were neither sick nor sorry. We had not been fatigued or uncomfortable, and if time had permitted we should have liked

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[2] 'Loose Leaves from the Travellers' Album at Chamonix.' By Albert Smith. In *Bentley's Miscellany*, 1841, vol. ix. p. 580.

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to remain all day where we were, in the enjoyment of a happiness that was perfect.' [2]

Here we find at last the spirit of the modern mountaineer.

It was probably after a hasty perusal of the distressing tales of hardships and suffering endured by the early climbers of Mont Blanc that the editor of Murray's 'Handbook for Travellers in Switzerland and the Alps of Savoy' inserted on page 333 of the 1851 edition the following disparaging remarks on our sport:—

> 'The ascent of Mont Blanc is attempted by few; of these the records are to be found at Chamouny. When Saussure ascended to make experiments at that height the motive was a worthy one; but those who are impelled by curiosity alone, are not justified in risking the lives of their guides. The pay tempts these poor fellows to encounter the danger, but their safety, devoted as they are to their employers, is risked for a poor consideration. It is no excuse that the employer thinks his own life worthless; he ought to think of the safety of others: yet scarcely a season passes without the attempt. It is a somewhat remarkable fact that a large proportion of those who have made this ascent have been persons of unsound mind.'

These absurd lines were reprinted in the editions of 1852, 1854, and 1856, and the statement regarding the persons of unsound mind was finally omitted in the edition of 1858, probably in consequence of a formal protest from the Alpine Club which had been founded the year before. By way of comment on the views expressed by this worthy editor, I need only recall the fact that the task of editing several subsequent editions of Murray's excellent Handbook has been entrusted successively to two of the most distinguished mountaineers of modern times—Mr. Freshfield, who has made three ascents of Mont Blanc, and the Rev. W. A. B. Coolidge, who has been to the summit no less than five times.

HENRY F. MONTAGNIER.

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[2] 'Poaching on Mont Blanc a Dozen Years Ago,' in *Fraser's Magazine* for July 1869, vol. lxxx. pp. 97–111 (anonymous, but by Mr. T. W. Hinchliff, the seventh President of the Alpine Club). Mr. Hinchliff's party consisting of himself, Mr. Robert Walters and the guides Zacharie Cachat, Jean-Pierre Payot, Michel Simond and Pierre-Tobie Simond, made the ascent on July 30, 1857. Mr. Walters was present at the Jubilee Dinner of the A.C. in 1907.

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Account of a Journey to the Summit of Mont Blanc.

By Dr. JEREMIAH VAN RENSSELAER, of New York.[1]

To Professor Silliman.

Geneva, *July* 19, 1819.

DEAR Sir,—I take the liberty to send you a hasty sketch of a short tour that I completed a few days ago, including the Vale of Chamouny—and an ascent to the top of Mont Blanc. As this latter is a journey not often made, and never before by an American traveller, I trust no apology will be thought necessary.

As I have suffered much both from heat and cold, and am still labouring under an affection of the eyes and face, you will excuse such errors as may occur in orthography &c. As to the statement, I copy it from notes made on the mount, and soon after my arrival in the Vale.

With much respect, I have the honour to be
Yours truly,
Jeremiah Van Rensselaer.

Returning from Italy by the grand road of the Simplon, which, more than his victories or reverses, will contribute to the fame of Bonaparte, we enjoyed the scenery of the Valais and the south side of the Lake before arriving at Geneva. We had scarcely finished with the curiosities of the place when my friend and fellow-traveller, Mr. W. Howard, of Baltimore, proposed a visit to the Vale of Chamouny.

This delightful valley, the most elevated in Europe, and almost separated from the world, lies 18 leagues S.E. of Geneva —it is 5 leagues long, and ½ a league broad, and is covered during the few months of summer with the most luxuriant vegetation. To the N. rises the chain of Red Needles (Aiguilles Rouges); to the S. the gigantic mass of Mont Blanc; to the N.E. is the Col de Balme; and to the S.W. the mountains

[1] [Reprinted from the *American Journal of Sciences and Arts*, for November 1820 (vol. ii. pp. 1–11). I am deeply indebted to Mr. G. A. Solly for kindly placing his copy of this paper at my disposal.]

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of Lacha and of Vaudagne. The river Arve, joined by Arvieron, that gushes impetuously from beneath the glacier des Bois, flows rapidly through the length of the Vale; and receives the tributary streams of the glaciers that increase its size only to augment the volume of the Rhone, into which it pours its accumulated waters. The beauty of the Vale, the fertility of its soil, the innocence and simplicity of its inhabitants, and the singularity of the landscape, in which mountains of ice alternate with fields of flowers, have long drawn the attention of travellers. Each glacier, each needle, each mountain forms a distinct curiosity, and a whole season might pass pleasantly enough in contemplating Nature in her mildest and in her most chilling moods—for she smiles and frowns alternately on the Vale.

The most interesting object that strikes the attention, where everything is worthy of notice, is Mont Blanc. The frozen glaciers, that like feet seem to support its huge mass in the air, while its snow-capped summit is lost in the heavens, form a singular contrast to the green fields in which they rest. Having already visited some of the highest points of the Apennines, in traversing the ridge as it extends through the Tuscan, the Roman, and the Neapolitan States into Sicily, I felt a desire to stand on the lofty mount before me, and mentioned it to my companion. The difficulty of the undertaking, the many failures, and the small number of those who have succeeded, seemed at first very discouraging—but we resolved upon the attempt and sent out for guides. These it was not difficult to procure; for as the inhabitants considered it a mark of courage and perseverance, it is ever thought an honour to have been on the summit, and is mentioned in praise of him who has happily attained the object. It was therefore difficult to choose—but we took those who had before made the attempt. The women too were to be consulted, for, however anxious they might be that their sons should procure the honour, they were loth to let their husbands encounter so many perils.

In vain did the guides represent to us the dangers and privations of the undertaking—in vain expatiate on the heat, the cold, the fatigue, and above all on the many failures. We conversed with Balmat and Paccard, the two first who ascended, and, having previously agreed with a master guide, appointed the next day for the ascent.

At 3 o'clock A.M. on the 11th inst. mass was said for a successful journey and a safe return, and at 5 we commenced

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our way—our guides preceded with the necessary articles and we followed, confident of success. For a league our way lay through fields of grain, and then commenced the woody region that extends double the distance up the mountain. Here we found ourselves at the edge of the Glacier Bossons (one of the grandest of the mount) and for two leagues mounted near to its side. The way was painful and difficult, winding on the mountain side, and crossing streams that pour constantly from the higher regions. We had now ascended 5 leagues, and were about to quit the land; here commenced the region of eternal ice. Balmat, the veteran hero of the hoary mount, who first placed foot on its frozen summit, had thus far accompanied us: his age prevented him from ascending farther, and, wishing us a safe return, he retraced our mountain path. Thus far we had followed a kind of path, but, once on the snow, a bleak region extended before us—no footstep marked the white surface—no sign of life or animation arose to cheer us. Here, too, commenced the dangers of the way, and we were forced to follow in regular succession:—first went a guide with two long poles to search for crevices, that we might avoid them—then followed a man with an axe to cut foot-holes in the ice; then came two who changed with the above, and formed a relief: next followed a man with the ladder—at some little distance I followed tied by a rope round the waist to two guides, one of whom preceded, the other followed me—and lastly came Mr. H. tied in the same manner to two other guides. Each of the men carried a knapsack with provisions, blankets, sheets for a tent, cords, coals, a pan to melt snow in, a chafing-dish, bellows, &c., &c.; and each of us was armed with a pole about 9 feet long, with a sharp iron spike in the end, to support ourselves and to prevent us from falling.—Our line of march seemed rather formidable as we ascended and descended the broken glaciers.

We encountered many crevices, some of which were distinctly seen; others more than half hid by the snow. Occasionally masses of ice had sunk, and left the remaining wall rising 40 or 50 feet above us: in such cases it was necessary to search the lowest end of the wall, and ascend by the ladder, or by cutting stepping holes in the side. This, however, could be attempted only where the wall was not more than 20 feet high, as our ladder was only of that length. Where, besides the wall, there was a crevice at the bottom, the ascent was indeed dreadful; for, while crossing a gulf that yawned 150 or 200 feet beneath us, we were climbing the ladder placed against

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the side of ice, where the least slip must have precipitated us to immediate death. Where the sides of the crevice were of equal height, the ladder was laid down, and we then crawled over on all fours. In a few cases it occurred that an arched bridge of snow connected the sides, and here it behoved us to tread lightly and with caution, lest, breaking through, we should have sunk into a pit from which it would have been impossible to return. Often frustrated in our course by unforeseen crevices and walls, we were forced to make a lengthened march; but at last clambered up a solitary rock that rises from the snow, 8 leagues from the village. It is called the Grand Mulet, and having served several travellers as a resting-place, was chosen by us as the only rock on which it was practicable to sleep. It is composed of quartz and micaceous schist, rising in perpendicular laminæ 60 or 70 feet above the ice, and 7,800 feet above the level of the sea. A few pieces of schist arranged into a kind of platform afford a tolerable resting-place for him who is not over fastidious on such a journey. On one side rises the sharp Aiguille de Midi, and on the other the Dôme de Gouté, that seems to soar far above Mt. Blanc. It was yet early in the afternoon, and the sun beat down so powerfully as to render the heat very inconvenient: occasionally, however, a cloud of thick mist enveloped us—it was then extremely chilling and uncomfortable. While on the Grand Mulet we observed a beautiful butterfly, of the most vivid and brilliant colours, making its way towards the summit of the mountain. At 6 P.M. Réaumur's thermometer stood at 4° (41° of Fahrenheit) above freezing. With the aid of a blanket, and a sheet placed so as to keep off the wind, we formed a tolerable tent, and lay down to refresh ourselves. Night soon closed upon us, and rendered our situation still more appalling:—the dead silence of darkness was broken only by the groans of the weary, or by the loud thunder of a fallen avalanche that roused us from an imperfect sleep.

On the 12th at 2 A.M. the guides began to make preparations, and at 3 we resumed our journey. A road had been cut for some distance the evening before, and, the snow being hard, we advanced without great fatigue or danger, to the Grand Plateau, a distance of 4 leagues: it is a plain, with a more gentle elevation extending about a league towards the summit. Here we rested some time, and one of the guides found himself unable to proceed. We, however, went on after taking some refreshment: the air was much rarefied, and the sun exceedingly warm. At the end of the Plateau began the steepest

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ascent: dreadful avalanches that seemed falling with their own weight hung over our way, while fearful chasms yawned beneath us. The elevation was too great to allow us to ascend in a straight line, our path therefore was in a zigzag course towards the top, every step being cut in the ice with a hatchet. The path was so difficult and the rarefaction of the air so great, that even the stoutest guides could not advance more than fifteen steps without stopping to rest—and Mr. H. found himself so much incommoded that we feared he would have to return. His perseverance enabled him to proceed, and at 11 o'clock we arrived at the Petit Mulet, a granitic rock that just shows itself above the snow; here some of the guides being much fatigued we rested some time. From this rock the ascent is not steep, but very fatiguing, on account of the rarefaction of the air—we, however, reached the summit at half-past 12—and stood upon the highest point in Europe. The top is formed by a ridge running N.E. and S.W. about 12 feet above the little plain that lies to the south. As to the depth of snow upon it we are unable to form a conjecture. Bonaparte, after many fruitless attempts, succeeded in having placed here a pyramid 12 feet high. It was visible for three years, but has gradually disappeared, and has not been seen for some years.[2] In the sun the thermometer was at the freezing-point; in the shade 3° of Réaumur below it; (25°.25 of Fahrenheit). A bright sun shone on us, through a vault of indigo blue, in which not a spot was obscured by a cloud. To the N., at the distance of nearly 100 miles, rose the black ridge of Jura; farther east lay the mountains of Underwalden and of Uri; to the E. St. Gothard and the Simplon; St. Bernard and Monte Rosa seemed to stand at our side, and Piedmont to stretch at our feet.—A light floating vapour hid from us the vales of Lombardy and of France.—On one side the happy valley of Chamouny lay beneath and the little village shone in the smiling plain, beset with fields and woods;—on the other the Valè d'Aoste, with her cheerful river, extended her green surface to relieve the eye. The glaciers of Bossons, des Bois, d'Argentière and of Tour seemed sliding into the meadows—while the frozen waves of the Mer de Glace seemed hushed into a calm,—and the Montanvert, with the needles of Dru, Géant, Charmoz, Midi, &c., showed their splintered

[2] [Pictet wrote in a footnote to the French translation: 'Nous avons lieu de croire cette anecdote fort apocryphe.' There is no doubt, however, that the ascent in question was actually made.]

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pinnacles far below us. We remained an hour and a half on the small plain to the south of the crowning ridge, and here four of our guides laid themselves on the snow and slept for some minutes. We did not feel fatigued, but found our respiration much quickened and our pulse greatly accelerated; this was particularly the case with Mr. Howard, who is of a fuller habit than myself. Though we had provisions, none of us felt an inclination to eat; but our thirst was great, and we found vinegar and water the most refreshing beverage. We fired a pistol three times nearly filled with powder, and well wadded; the report was that of a squib.

At 2 we began our descent with an intention to examine the different rocks that broke through the snow. The highest is about 350 feet below the summit, formed of granitic tables, that lay loose on each other, and of which feldspar is the predominant ingredient. The Petit Mulet is of the same formation—and I may here add, that to be minute would only be to give you what has already been printed.

The descent was perhaps more fatiguing than the ascent had been, and far more alarming, for we now saw the crevices that yawned beneath us; and the reflection of a bright sun from the glistening snow almost prevented us from seeing our path, the least deviation from which would have been inevitable death. Part of one of the avalanches that threatened us in our ascent had already fallen and lay scattered over our path, and the part that yet hung suspended above us seemed ready to follow its fallen half. Dreadful indeed was the silence in which, with hurried step, we hastened down the sidehill. Fearing to raise a look from the pathway, and scarcely daring to breathe, we arrived near the bottom. The danger being now past, we turned to survey the hanging mass; —the eye was soon satisfied—and in speechless meditation we resumed our way.

At the Grand Plateau we found the guide who had returned —and it was here we discovered that our thermometer was broken. It was exceedingly hot, and we rested only a few minutes to gain breath, and refresh ourselves. Thus far the ice and frozen snow had formed a good path—but the influence of a sun, now more powerful than I ever felt, had melted the snow; and after leaving the Plateau, we sunk every third step, nearly to the waist. It was of no use to send the guides to break the way, nor to seek a new road—it was immaterial if we followed their track, or made one for ourselves—we still sunk. Our progress was further interrupted by some crevices

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that we had not seen in the morning—and being wide, with one side higher than the other, our ladder was of no use. At these places we sat on the snow, and slid down so fast as not to break the frail covering of the crevice. This was the most fatiguing part of the whole journey, and we were happy once more to climb the steep sides of the Grand Mulet. The sun had set upon the valley, but its rays yet beamed upon our elevated rock—its effects had been severely felt—and though scorching during the day, it seemed in pity to lend its lingering light to shorten the dreariness of the night.

Fatigue had nearly lulled us to sleep, when thinking on the last journey of the morrow, some of the guides turned to see the path by which we had ascended the day before. While yet following its traces they saw part of it lost in an avalanche—a mass had fallen in, and our road was gone. Few and unrefreshing were the hours of our repose—the cold was excessive—and some coals in the chafing-dish, kept constantly enflamed by the bellows, served to keep us from freezing. Our faces pained us almost intolerably—our eyes were so inflamed that we could scarcely distinguish an object at the distance of a few feet—our fingers and toes were nearly benumbed—and the whole system disordered, not so much from fatigue as from a strange influence of the atmosphere.

Early on the morning of the 13th we began the labour of the last day's journey. Our path had been partly lost in an avalanche, and partly dissolved in the melting sun of yesterday—and we followed the track of the chamois, that has never been known to err. With much difficulty could we discern our way, as we were nearly blind—the crape and goggles we had worn the day before were now of no avail. We happily quitted the ice soon after the sun shot its first rays on the mountain we had left—having been forty-five hours on the frozen surface. Happy were we all, when, arriving again at the woody region, we heard the tinkling of the herd—we reposed a few minutes in the shepherd's hut—and arrived at Chamouny at 10 o'clock.

We went immediately into a darkened room—and after washing in cream, went to bed, but not to rest. Our eyelids were glued together, and our faces entirely blistered. When the sun was down, we rose for a few minutes—and again lay down. Our fatigue overcame our pain—and exhausted nature sunk to sleep:—we awoke in the morning much refreshed—so that on the 14th we came to Geneva in a darkened carriage. The skin has fallen from our faces, which are now, though

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raw, much better—the inflammation of the eyes is subsiding, but still troublesome and confines us to the house.

The minute and accurate observations of Mons. de Saussure have left but little for future travellers. His genius for a time seemed to reside in the Alps, and it was his delight to stand in reality or in imagination on those elevated summits from which the world seemed to lie below him. His daring spirit led him to climb the most difficult and dangerous points —and it was on one of these, the Col du Géant, that in 1788, he passed fifteen days in performing a series of physical and meteorological experiments of the most interesting nature—at the elevation of 10,578 feet above the sea. His researches on the different summits are of the same kind, and have been found accurate by the test of succeeding observations. Our ascent to the summit of Mont Blanc, then, may be considered a journey of curiosity: but it was our wish to examine the temperature and rarefaction of the atmosphere, to obtain an exact knowledge of glaciers and of the frozen region, and to survey the rocks. Our thermometer was broken the second day, when after taking the temperature at the top, we were about to notice it at stated distances on our descent. Our vessels of air from the summit were injured in sliding down the declivities or in wading through the snow. As to the rocks little can be said of them: the nature of the mountain has long been well known, and it would be useless to enlarge upon the accounts already given. Thus our journey has been of no avail in adding to our knowledge of the rarefaction of air at the top, yet we are satisfied with having made the attempt. It may be ascertained by a barometer, which we had not, or by filling *many* vessels, so that some at least might be brought down safe. This too would allow a portion for analysis—I know not that the attempt has been made.

Mons. de Saussure found the absolute height of Mont Blanc to be 14,700 feet; Deluc made it 14,346; Prof. Pictet says it is 14,556; while M. Tralles, who has measured it three times with the same result, makes it 14,793 feet; making its absolute height 5,355 feet less than that of Chimborazo; but its relative height is greater, as it rises 11,532 feet above the vale of Chamouny, while Chimborazo is elevated only 11,232 feet above the valley of Tapia—making a difference of 300 feet relative height.

It was in 1760 that M. de Saussure seems first to have thought of measuring Mont Blanc, and offered a reward to the person who should discover a way to the summit. His

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offers were sufficient to induce many to make the attempt—and for twenty-five years, unsuccessfully. The most important trials are recorded as follows :—

The first attempt was made in 1762 by an inhabitant of Chamouny; he failed, as he only reached the glacier Bossons.

In 1775 four men, following the same route, advanced to the Mount de la Cole, running parallel to the glacier Bossons.

In 1783 three others tried the same path, but were forced to return by a strong desire to sleep, which would have been fatal, if indulged.

In the same year, M. Bourrit of Geneva was driven back by a snow storm. The following year he was again frustrated by the violence of cold and fatigue.

In 1785 M. de Saussure and M. Bourrit made another attempt with fifteen guides. They arrived the evening of the second day at the Needle de la Côte, at the elevation of 11,442 feet above the sea: the softness of the snow and their fatigue made them return.

In 1786 six men made another trial; but were forced to relinquish the enterprise. One of them, named J. Balmat, wandered from the rest, and passed the night alone on the glacier—in the morning he found himself near the top. He returned and suffered much from an affection of the face and eyes. He was attended by Dr. Paccard, and in gratitude offered to conduct him to the summit—which he did a few weeks afterwards. They found it extremely cold—their provisions froze in their pockets, and the ink in their inkhorns —they remained only a few minutes, and descended to the village in a shocking condition. Dr. P. had his hands and feet frozen—and .Balmat's face was disfigured for eight days.

The same year de Saussure tried again without success.

The year following he made another attempt with seventeen guides—and on the third day of his journey reached the summit. He passed there five hours in making those observations and experiments that have gained him so much and so deserved reputation. On the fifth day they returned to Chamouny.

The next day M. Bourrit made his fourth attempt, but was forced to return.

In 1788 he tried again with Mr. Woodley, an Englishman, and M. Camper, a Hollander—a storm dispersed the party,

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but Mons. B. with three guides gained the summit. They descended immediately. Mr. Woodley had his hands and feet frozen,—M. Bourrit was forced to use ice applications for thirteen days—the guides suffered from frozen fingers and toes.

In 1787 Col. Beaufoy, an English officer, gained the summit, and returned with the fear of losing his sight—he however recovered.

In 1792 four Englishmen undertook the task—but were forced to return—all of them much hurt. One guide had his leg broken, and another fractured his skull.

In 1802 Messrs. Forneret and d'Ostern with seven guides gained the top, and declared on their return that nothing could induce them to make another attempt.

In 1816 Count du Lusy, a Russian, ascended a little above the Petit Mulet, but was obliged to return. His feet were so frozen that the skin came off with his stockings; and he was long forced to use crutches. Two of his guides were frozen nearly to the same degree.[3]

In 1817 Count Malazesky, a Pole, gained the top with eleven guides—his nose and ears were frozen.

There have been various attempts made by persons who returned after the first or on the second day; such trials have not been recorded.

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[3] [Comte de Lusi was very probably a French *émigré* serving in the Prussian Guards. He published a narrative of his expedition entitled 'Voyage sur le Mont Blanc entrepris le 15 septembre 1816 (Vienne: 1816. 16mo. pp. 54) which is now extremely rare. His guides were Joseph Marie Couttet, Frédéric Balmat, Jean Pierre Tairraz, Pierre Joseph Folliguet, Jacques Couttet, Michel Paccard and Mathieu Frasserand.

M. de Lusi tells of meeting one of the guides who accompanied the four Englishmen in the 1792 attempt on Mont Blanc: 'Au moment où nous allions partir, un des habitans accourut vers moi, et me fit voir un trou énorme qu'il avait à la tête, ayant subi l'opération du trépan. Il me fit l'observation encourageante qu'il avait reçu cette blessure en faisant le voyage que j'allais entreprendre.

Another attempt on Mont Blanc hitherto unknown to Alpine historians is briefly recorded in the *Gazette de Lausanne* of August 12, 1814. 'Genève 10 août. Trois anglois ont essayé de parvenir ces jours derniers à la cime du Mont Blanc; ils étoient accompagnés par 18 guides; mais arrêtés dans leur route par les crevasses, ils ont été forcés de revenir à Chamonix.']

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Narrative of a Journey to the Summit of Mont Blanc made in July 1819.

By Wm. HOWARD, M.D.

The account of the following journey was written a few days after its execution, while the author was confined to his chamber by the inconvenience he had suffered, and it was then penned for the gratification of his immediate friends, and without any view to publication. The partiality of friends, however, having permitted it, during his absence, to appear in the *Analectic Magazine* for May 1820, it excited more attention than he could have anticipated, which has induced the author to correct the errors arising from haste and other sources, and to republish it in the present form.[1]

Baltimore *April* 1821.

Geneva, *July* 1819.

YOU, my dear friend, who are well acquainted from my infancy with my clambering disposition, which, within these few months, has carried me to the top of both Vesuvius and Ætna, will not be much surprised to learn that I have attempted, with success, to mount to the summit of Mont Blanc: an aerial journey which the sight of this mountain has inspired many persons with a wish to accomplish; but in which few have engaged, and still fewer have succeeded. I am somewhat afraid that you will condemn the expedition as a wild one, and will justly consider the gratification of our curiosity, which was, unfortunately, the only object we attained, as an inadequate recompense for our toil and danger; but you have no cause to fear my embarking in similar adventures in future. Having reached a spot, undoubtedly the highest in Europe, and, with the exception of the Himalaya mountains in India, the highest in the Old World, my curiosity is completely gratified, and there is scarcely any possibility of my meeting with an enterprise of this nature, of sufficient

[1] [The narrative was first printed under the title 'A Visit to the Summit of Mont Blanc, in a Letter from an American Traveller to his Friends in the United States.' It was reprinted under the above title as a separate volume (12mo. pp. 49, 1 plate) in Baltimore in 1821.]

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NARRATIVE

OF

A JOURNEY

TO THE

Summit of Mont Blanc,

MADE IN JULY, 1819.

BY WM. HOWARD, M. D.

"Mont Blanc is the monarch of mountains.
"They crown'd him long ago,
"On a throne of rocks, in a robe of clouds,
"With a diadem of snow."

BALTIMORE:
PUBLISHED BY FIELDING LUCAS, JR.
J. Robinson, printer.
1821.

FACSIMILE OF FRONT COVER

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BACK COVER



Passing a crevice in the Glacier *of* Boissons

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magnitude to renew its excitement: since five of the loftiest of the Alleghanies piled on each other would scarcely reach the height I have attained. To give you a correct idea of the nature of our undertaking I will begin with a concise account of this king of the Alps, and of the various attempts that have been made to reach its summit.

Mont Blanc is situated amidst some of the highest mountains of Savoy, forming a part of the great chain of the Alps, above which, however, it raises far its snowy head, as with a dignified air of conscious triumph. It is this white head, which its elevation renders doubly bright, that gives its name. On the north side of the mountain, and immediately at its foot, is the valley of Chamouny, which is sixteen leagues south from Geneva, and is much frequented in the summer season by the inhabitants of that city, and strangers, who throng to this enchanted vale, to enjoy the coolness of the air, and to view its stupendous glaciers, several of which are formed by the snow and ice gliding down from Mont Blanc itself. On the south-east side is the valley of Entrèves, which separates Mont Blanc both from the Great and the Little St. Bernard, and through which runs a small river whose waters join the Po below Turin, while the Arva, which flows through Chamouny, joins the Rhone near Geneva. These rivers finally discharge themselves into the sea, at the distance of several hundred miles from each other: the one into the Mediterranean near Marseilles, and the other into the Adriatic near Venice. The chain of Alps, of which Mont Blanc forms a part, runs from N.E. to S.W. and is partly surmounted in its neighbourhood by sharp-pointed rocks, whose sides are too steep for the snow to rest upon, and of which seven, rising abruptly to a great height, have the appropriate name of the 'Needles of Chamouny.'

The height of Mont Blanc, according to the observations of Saussure, is 14,790 French feet above the level of the sea (about 15,500 English feet, or something less than 3 miles), which is only 5,300 less than that of Chimborazo, the summit of which has never been reached; on the other hand, its relative height above the surrounding country is greater; for Mont Blanc is 11,500 above the valley of Chamouny, while Chimborazo, according to Humboldt, is only 11,200 above the plain of Tapia, at its foot. It is calculated that, from this height, the eye could reach sixty-eight leagues, or about 170 of our miles, without being intercepted by the convexity of the earth. Mont Blanc is seen from Lyons in

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all its magnificence; from the mountains of Burgundy, from Dijon, and even from Langrès, sixty-five leagues distant in a straight line: M. Saussure thought he recognised the mountain of Caume, near Toulon.

In 1760 and 1761, Saussure, the celebrated philosopher of Geneva, then engaged in examining the natural history of the Alps, promised a considerable reward to any person who should succeed in finding a practicable path to the summit, offering even to pay for the lost time of those who made ineffectual efforts. The first who undertook this was Pierre Simon, a hunter of Chamouny, in 1762[1]; but he was unsuccessful. In 1775, four men of the same village endeavoured for the same object, and with as ill success, to follow the ridge of the Montagne de la Côte, which runs parallel to the Glacier of Bossons. In 1783, three others followed the same track, but were attacked by an increasing disposition to sleep, from which they could only relieve themselves by returning. M. Bourrit, of Geneva, made two ineffectual attempts the same year,[2] and the following year another, accompanied by Saussure, his own son, and fifteen guides.

In June 1786, six men of the valley of Chamouny, renewed the effort to reach the summit, but fatigue and cold forced them to renounce it; one of them, however, Jacques Balmat, separating from his companions to search for crystals, and, having lost himself, was prevented by a storm from rejoining them, and compelled to pass the night on the snow, unprovided and alone; youth, however, and the vigour of his constitution, saved his life. In the morning he perceived the top at no great distance, and having the whole day before him to provide for his descent, he examined leisurely the approaches to it, and observed one that appeared more accessible than any he had hitherto seen. At his return to Chamouny, he was taken ill, in consequence of his great exposure, and was attended by Dr. Paccard, the physician of the village, to whom he communicated his discovery, and offered, in gratitude for his care, to guide him to the summit of Mont Blanc.

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[1] [De Saussure mentions two attempts by Pierre Simon ('Voyages,' 8vo. ed. vol. iv. p. 389); but Van Rensselaer and Howard are, I believe, the first writers who give the date. Their information was probably obtained from de Saussure's friend Marc-Auguste Pictet whose acquaintance they made in Geneva.]

[2] [As a matter of fact, Bourrit's only attempt in 1783 was made with Dr. Paccard. See 'A.J.' vol. xxiv. pp. 419–423.]

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In consequence of this, Jacques Balmat and Dr. Paccard set out from Chamouny on August 7, the same year, and slept on the top of the Montagne de la Côte. The next day they experienced great difficulties and excessive fatigue, and were long doubtful of the ultimate event of their enterprise; but finally, at 6.30 P.M. they reached the pinnacle of the mountain, in sight of many visitors who were at Chamouny watching their progress with telescopes. The cold was so intense, that provision was frozen in their pockets, the ink congealed in their inkhorns, and the mercury in Fahrenheit's thermometer sunk to 18½°. They remained about half an hour on the top, regained at midnight the Montagne de la Côte, and, after two hours' repose, set out for Chamouny, where they arrived at 8 A.M. with their lips swollen, their faces excoriated, and their eyes much inflamed; and it was some time before they recovered from these disagreeable effects.

As soon as the intelligence of this success reached Saussure at Geneva, he determined on making a similar attempt: which he in fact did the same year, but was compelled by unfavourable weather to return. He was, however, not discouraged, but as the season was now far advanced, he postponed his operations until the ensuing summer. Accordingly, on August 1, 1787, he again set out from Chamouny, accompanied by his servant and eighteen guides, carrying a tent, a bed, ladders, cords, provisions, and philosophical instruments.

The party arrived early the same day at the Montagne de la Côte, where they passed the night. The next day, notwithstanding an increase of dangers and difficulties, they passed under the Dôme de Gouté, and reached a platform, or small plain, at the height of 11,790 ft. above the sea, where they pitched their tent in the snow, and passed the night. The following morning (August 3), the snow was so hard, and the ascent so steep, that they were compelled to cut their footsteps with a hatchet, and it was only by proceeding with the greatest caution that they were enabled to pass this dangerous acclivity with safety. They, however, persevered, and reached the summit about an hour before noon, in view of many persons who were observing them from Chamouny. M. Saussure turned his eyes to the house where his mother[4]

[4] [Our author is mistaken here, for de Saussure's mother, as far as I am aware, never visited the Chamonix valley. His wife and two sisters-in-law, Mmes. Turrettini and Tronchin were, however, in the village during his ascent.]

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and sisters were watching his progress with a telescope, and had the satisfaction of seeing the waving of a flag, which was the signal they had agreed to make, as soon as they should be assured of his safety. The latter part of his ascent was the slowest and most fatiguing, owing to the difficulty of breathing, occasioned by the rarity of the air: the stoutest of his guides could not take more than thirty steps without stopping to take breath. No one had the least appetite, but all were much tormented by thirst. The guides pitched the tent, in which M. Saussure remained four hours making a number of observations. At 3.30, the party began to descend, and slept 1,100 ft. lower than the preceding night. The next day they arrived, without any accident, at Chamouny.

This successful expedition of Saussure, and the interesting account he published of it, inspired many persons with a wish to accomplish the same task; but they were generally soon deterred by an examination into the difficulties attending its execution, and returned satisfied with a view from the valleys below, of the terrific glaciers, and everlasting snows, which defend the approaches to the summit. The following are the principal attempts that have since been made, and it will be perceived that, of these few, only a part have succeeded.

On August 8, 1787, five days after M. Saussure's return, Colonel Beaufoy, an Englishman, set out from Chamouny for Mont Blanc, accompanied by ten guides. He reached the top the following day, and returned the third day to the village, with his face and eyes so inflamed that he nearly lost his sight in consequence. As he was not properly provided with instruments, he was unable to add much to the observations which had been made by Saussure. He, however, determined the latitude of the summit to be 45° 49′ 59″.

The year following these two journeys (1788), Mr. Bourrit, of Geneva, in company with his son, two other gentlemen, and a number of guides, attempted the ascent of Mont Blanc. The party was dispersed by a storm, and only Mr. Bourrit, his son, and three guides, succeeded in reaching the top, where the violence of the cold compelled them to abridge their stay to a few minutes.[5] While there, Mr. Bourrit thought

[5] [Here again Howard was misinformed, for only Woodley with Jacques Balmat and three other guides succeeded in reaching the summit. See 'A.J.' vol. xxv. pp. 616–617, and vol. xxx. pp. 119–126. Bourrit describes Woodley as 'le fils du gouverneur de l'Amérique

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be perceived the sea in the direction of Genoa; but the immense distance rendered the objects at the horizon too indistinct to be certain of it. The whole party returned to Chamouny in a terrible condition. One of Mr. Bourrit's companions, who had lost himself, suffered dreadfully, as well as the guides who were with him, and returned with his feet and hands frozen, while some of the company, who were more fortunate, had only their fingers and ears in the same condition. Mr. Bourrit was obliged to wash for thirteen days in ice water, to restore the use of his limbs, which had suffered from the extreme cold.

In 1792,[6] four Englishmen undertook the same journey, but were prevented, by an accident, from proceeding farther than the Montagne de la Côte, where, unfortunately, one of the guides had his leg broken, and another his skull driven in: they themselves were all more or less wounded. A false step of one of the foremost of the party upon a loose rock, which brought it and a number of others down upon his companions, was the cause of this accident.

M. Forneret, of Lausanne, and M. d'Ortern[7] set out on August 10, 1802, with seven guides for Mont Blanc, and, notwithstanding a storm, reached the summit the following day.[7] They remained there only twenty minutes, and returned on the 12th to Chamouny, protesting that nothing in the world could tempt them to undertake again the same expedition.

In August 1808, Jacques Balmat, surnamed Mont Blanc, from his having been the first to discover the way to the summit, safely conducted thither fifteen of the inhabitants of Chamouny, one of whom was a woman.[8]

Angloise,' and Mr. C. E. Mathews adds that his father was Governor of the Leeward Islands. It is to be hoped that some member of this Club with a taste for research will follow up this clue and tell us something more about this traveller who was the second Englishman to set foot on the summit of a high peak in the Alps.

[6] [Howard's authority for this statement was evidently a brief note added by Professor M. A. Pictet to his translation of Van Rensselaer's narrative in the 'Bibliothèque Britannique' of Geneva, vol. xiv. p. 234. Unluckily the names of these travellers have not come down to us.]

[7] [For D'Orthern read Dorthesen. See 'A.J.' vol. xxv. pp. 617–618 and vol. xxx. pp. 127–129.]

[8] [The date of this ascent is stated by Balmat himself, in a MS. note discovered some years ago to have been July 14, 1808. His companions were Ferdinand and Jean, his two sons, Victor and

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About this time also he returned with two of his companions, and placed on the top an obelisk of wood, twelve feet in height, (which they brought up in pieces) to serve in the trigonometrical survey of the country, that was then being made.[9]

In 1812, M. Rodasse, a banker of Hamburg, undertook and accomplished the same journey without any accident.

On September 16, 1816, the Comte de Lucy, a Frenchman, succeeded, notwithstanding the severity of the cold he experienced, in attaining a rock only 600 ft. lower than the summit of Mont Blanc. He was there, however, so entirely overcome with cold and fatigue, that he was unable to proceed this short distance, and compelled, with much reluctance, to return. On reaching the valley he was unable to walk, but was carried by his guides to the inn, where his feet proved to be so much frozen that, on drawing his boot, the skin peeled off and remained in it. Two of his guides were also severely frozen.

Count Malzeski, a Pole, left Chamouny August 5, 1818, for Mont Blanc, accompanied by eleven guides, reached the summit the following day, and returned in safety the third, without suffering much more inconvenience than having his nose frozen.

During our visit to Chamouny, in the beginning of this month, my friend Dr. Van Rensselaer and myself, in our various excursions to the glaciers, and other scenes of the valley, had frequently opportunities of conversing with the guides who had participated in these journeys, and among them with old Balmat, the Columbus of the Mont Blanc. The result was that our curiosity was strongly excited, and being induced by their representations of the almost certainty of succeeding in the present favourable weather, we finally determined, after much deliberation, to make the attempt. We therefore engaged Marie Coutet, an experienced guide, who had been three times on the summit, as leader, and eight other guides to accompany us. They refused to undertake the journey with a smaller party on account of the number

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Michel Tairraz, and Pierre-Marie Frasserand. The original document was in the possession of the late M. J. P. Cachat in 1908. It has been printed several times. (See 'A.J.' vol. xxi. pp. 408–412, note by Mr. C. E. Mathews; 'Ann. du C.A.F.' 1902, pp. 552–557; the 'Revue Savoisienne' vol. xlviii. pp. 293–297; and the interesting documents published in the 'Revue Alpine' 1896, pp. 112–117, by Mdlle. Marie Paillon.)]

[9] [According to the Balmat document mentioned above, this ascent was made on July 25, 1811.]

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of articles which it was necessary to take with us, as a ladder, cords, provisions, charcoal to melt the snow for drinking, and a number of other things, which were indispensable, and which formed a sufficient quantity to load each of the nine with a considerable burthen. One day was occupied in making preparations on which our comfort and our ultimate success depended. These were passed in review in the evening, and having found that nothing material was omitted, an early hour the next day was appointed for our departure.

Accordingly, on Sunday, July 11, we left the village of Chamouny, at 5 o'clock, full of anxiety ourselves, and accompanied by the good wishes of the honest inhabitants for our success. The necessity of taking advantage of the fine weather opposed our delaying another day. Our guides, who, in common with all the inhabitants of the mountainous parts of Savoy, are very attentive to the duties of their religion, were unwilling to set out on a church day, without having previously attended service. They had, therefore, induced the curé to celebrate mass at 3 o'clock, and, notwithstanding the fatigue they expected during the day, the early hour had not prevented them from attending it.

We descended the valley by the side of the Arva, about a league, till we approached the glacier of Bossons, and then turning suddenly to the left into the woods, we began immediately a very steep ascent, parallel to and about half a mile from the edge of the glacier. After about 3 hours' toilsome mounting, we came to the last house on our road. It was the highest dwelling in the neighbourhood, and was one of those cottages called 'chalets,' which are inhabited only during three of the summer months, when the peasants drive their cattle from the plains below to the then richer verdure of the mountains. We found there the old man and his two daughters; his wife, as is the custom, was left behind to take care of the house in the valley. After refreshing ourselves with a delicious draught of fresh milk, and receiving the wishes of these good people for a *bon voyage*, we bade adieu to all traces of man, and continued to mount. Another hour's toil brought us above the region of wood, after which the few stunted vegetables we met with gradually diminished in size, and when we arrived, at 10 o'clock, at the upper edge of the glacier of Bossons, only a few mosses and the most hardy alpine plants were to be found.

We had been compelled a little before, by the precipices of the Aiguille du Midi, which presented themselves like a wall

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before us, to change our direction, and instead of proceeding parallel to the glacier, to strike off suddenly towards it. We had now a close view of some of the obstacles which bar the approach to Mont Blanc; the glacier of Bossons, on which we were about to enter, seemed to me absolutely impassable. The only relief to the white snow and ice before us was an occasional rock, thrusting its sharp point above their surface, and too steep to permit the snow to lodge on it. One of these rocks, or rather a chain of them, called the 'Grand Mulet,' which we had destined for our resting-place for the night, was before us, but far above our heads at the distance of 4 or 5 miles; the glacier, however, still intervened, and appeared to defy all attempts to approach it.

The glacier of Bossons, like all the glaciers of the Alps, is an immense mass of ice filling a valley which stretches down the mountain side, and is formed by the accumulated snow and ice, which are constantly, in the summer months, falling from above. While the glaciers are thus continually increasing on the surface, the internal heat of the earth is slowly melting them below. Hence, when they are large, there generally proceeds from under them a considerable stream: such are the sources of the Rhine and of the Rhone. Their surface often resembles that of a violent, agitated sea, suddenly congealed. They are frequently of several leagues in breadth, and from 100 to 600 ft. in depth. The snow which falls on them, to the depth of several feet every winter, is softened by the sun's rays in summer; and, freezing again at the return of cold weather, but in a more solid state, forms a successive layer every year. This stratum may be easily measured (as each of them is distinctly separated from its neighbour by a dark line) at the section made by those cracks which traverse every glacier in all directions. These cracks or crevices are generally thought to be caused by the irregular sinking of part of the mass, whose support below has been gradually melted away. They are formed suddenly, and frequently with a noise that may be heard at the distance of several miles, and with a shock that makes the neighbouring country tremble: this effect takes place principally in summer. These rents are from a few inches to 20, 30, or even 50 or 60 ft. in breadth, and generally of immense depth: probably extending to the bottom of the glacier. They present the greatest danger and difficulty to the passenger. They are often concealed by a layer of snow, which gives no indication on its surface of its want of solidity; and it often happens that the chamois hunter,

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notwithstanding all his caution, suddenly sinks through this treacherous veil into the chasm beneath.

We remained a couple of hours at our resting-place to take some refreshment, and to regain strength for our next difficult task. Jacques Balmat accompanied us thus far to point out the best means of attaining that spot on which he was the first to set foot; but the infirmities of age prevented him from accompanying us farther. Our feet seemed to linger, and to leave with reluctance the last ground they were to touch until the period of our return.

We, however, entered on the glacier with confidence in the skill and prudence of our guides; several of whom, being hunters and accustomed to chase the chamois over such places, were acquainted with all the precautions that it was necessary to take for our safety. To avoid the danger of falling into the crevices, especially those masked by the snow, we connected ourselves, three persons together, at the distance of 10 or 12 ft. apart, by a cord round the body: so that in case of one of the three falling into a chasm, the other two could at least support him, until assistance could be procured from the rest of the party.

Each person was provided with a pole 6 ft. long, and pointed at the bottom with iron, which we found to be a necessary article. Where the crevices were not more than 2 or 3 ft. broad, we leaped over them with the assistance of our staff; others we passed on natural bridges of snow that threatened every moment to sink with us into the abyss; and over others we made a bridge of the ladder, which was extremely slight as otherwise it would have been impossible for a man to carry it up the steeps we had ascended. Without its assistance, we could not have passed the glacier. Over this slender support we crawled with caution, suspended over a chasm, into which we could see to an immense depth; but of which in no instance could we see the bottom. We were sometimes forced to pass on a narrow ridge of treacherous ice, not more than a foot in breadth, with one of these terrific chasms on either side. The firm step with which we saw our guides pass these difficulties, inspired us with confidence; but I cannot even now think of some of the situations we were placed in without a feeling of dread; and especially when in bed and in the silence of the night, they present themselves to my imagination, I involuntarily shrink with horror at the idea, and am astonished in recollecting what little sensation I felt at the moment.

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We threw down into some of the narrow cracks pieces of ice and fragments of rock, and heard, for a considerable time, the more and more distant sound, as they bounded from side to side. In no instance could we perceive the stone strike the bottom; but the sound, instead of ceasing suddenly as would then have been the case, grew fainter and fainter, until it was too feeble to be heard. What then must be the immense depth of these openings, when in these silent regions, the noise of a large stone striking the bottom is too distant to be heard at the orifice!

The number of openings we met with, which were broader than the length of our ladder, and which, of course, we had no means of crossing, rendered our path extremely circuitous. We were often enabled, by the ladder's assistance, to scale high and perpendicular banks of snow. It sometimes proved too short to reach to the top; but where the steep was not absolutely perpendicular, we contrived in several instances to remedy this inconvenience. One of the guides, standing on the top of the ladder, enabled the rest, who clambered up by his assistance and over his shoulders, to reach the summit; when there, we easily drew up him and the ladder with cords.

We were occasionally compelled to retrace our steps, and we were frequently so involved in the intricacies of the glacier that we had to remain, without proceeding, a considerable time, until the guides, who were dispersed in every direction on the discovery, could find a practical path to extricate us.

In addition to these difficulties, I had not been long on the glacier before I perceived that my faithless boot had given way; which, as everything depended upon the state of our feet, was a serious misfortune. Necessity, however, is the mother of invention, and I contrived to bind it with cords in such a manner that it served me tolerably well the rest of the journey.

In consequence of all these obstacles, we only arrived at 5 o'clock at the 'Grand Mulet,' not more than 4 or 5 miles distant in a straight line from the point where we entered on the glacier; but, from the circuitous route we had taken, we could not have walked less, in this distance, than 14 or 15 miles. We were now 11,000 ft. above the level of the sea, and 8,000 ft. above the village of Chamouny. A niche on the steep side, and near the top of the rock, about 150 ft. from its base, and to which we had much difficulty in climbing, was selected for our lodging place; indeed, it was the only part of the rock that afforded anything like a level

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place. We were fortunate in finding the day had been so warm that there was water in some of the crevices of the ice, which circumstance enabled us to economize our charcoal. The sun shone very bright on our side of the rock; but, as soon as it sunk below the horizon, the eternal frost around us regained its influence, and the air became very cold. We had, however, time to dry our boots and pantaloons, and I found a pair of large woollen stockings that I had with me, an invaluable article. Our guides stretched the ladder from one point of the rock to another, and, throwing over it a couple of sheets they had brought for the purpose, formed a kind of tent, just large enough for Dr. Van Rensselaer and myself to creep in: a single blanket upon the rock was our bed. The guides were so loaded with indispensable articles that we had not been able to bring a blanket, or even an extra coat to cover us.

After a cold and uncomfortable supper, we crept into our den soon after the genial sun had left us, and endeavoured, by every means our ingenuity could suggest, but ineffectually, to keep ourselves warm. We suffered much from the cold, but principally toward morning, as the thermometer was several degrees below freezing. The night seemed to last at least twenty hours; at one time I thought the day must certainly be not distant, and was surprised, at looking at my watch by the light of the moon, to find it only 11 o'clock. Tired of inaction, and shivering with the cold, I crawled out, about midnight, to endeavour to warm myself by the exercise of clambering on the rock. The view around was sublime, and rendered me for a time insensible to all feelings of personal suffering.

The sky was very clear, but perfectly black; the moon and stars, whose rays were not obscured by passing through the lower dense region of the atmosphere, as when seen from the surface of the earth, shone with a brilliancy, tenfold of what I had ever observed from below; and the comet with its bright tail formed, in the north-west, a beautiful object. Nothing was to be seen around the rock on which we were placed but white snow and some heavy clouds, that, floating below us, shut out the valley from our view. The guides appeared to be all asleep, and the only interruption to the silence of death was the occasional avalanche, rolling with the sound of distant thunder from the highest part of the surrounding glaciers, and heightening the feelings of awful sublimity, which our situation was so calculated to inspire.

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As our lodging was extremely uncomfortable in every respect, we were under no temptation of lying till a late hour in the morning. On the contrary, we hailed with joy the first appearance of the dawn, which enabled us to substitute the warmth of marching for the cold inactivity from which we had suffered all night. We set out at 3 o'clock, leaving most of our provisions and other articles on the rock. Four hours of laborious, but not dangerous, walking brought us to a large plain, called the 'Grand Plateau,' which is nearly surrounded on the one hand by a spur of Mont Blanc and the Aiguille du Midi; on the other, by the Montagne de la Côte; while Mont Blanc presents itself directly in front. These mountains form a steep amphitheatre around this plain. Here we stopped an hour to breakfast, and to recruit strength for the last and most difficult part of the ascent. We were now more than 12,000 ft. above the level of the sea, and only 3,000 ft. lower than the summit, which was in full view before us. But I looked around, in vain, for any part of its steep sides that seemed to offer a possibility of being scaled; and when the guides pointed out the route we were to take among and over precipices, and huge broken masses of snow, and up almost perpendicular steeps I involuntarily shrunk at the prospect, and could not forbear casting my eye wistfully at our road back. But it would not have done to be deterred at this time by a few difficulties; and a moment's reflection on the skill and experience of our guides renewed our confidence, and we began cheerfully to mount the first steep before us. We here began to feel more seriously an effect that is always experienced at considerable heights, and which had not much incommoded us before. It was impossible for the strongest of us to take more than twenty or thirty steps without stopping to take breath, and this effect gradually increased as we continued to ascend; insomuch, that when near the summit, even the stoutest of our guides, who could run for leagues over the lower mountains without panting, could not take more than twelve, or at most fifteen steps, without being ready to sink for want of breath. If we attempted to exceed this number by even three or four steps, a horrible oppression, as of approaching death, seized us; our limbs became excessively painful, and threatened to sink under us. It is very possible, that Walter Scott's hero

> Up Ben Lomond's side could press,
> And not a sob his toil confess;

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but I am very certain he could not perform the same feat on Mont Blanc. It is remarkable, that a few seconds' rest was sufficient to restore both our strength and breath. One of our guides, a robust man, who had been once on the summit, was so much incommoded that we were compelled to leave him behind to await our return. I experienced some inconvenience from a slight degree of nausea and headache, of which most of those who have made this journey have complained. When ascending Ætna, two months before, I had been seriously affected both by a difficulty of breathing, and by a violent thumping of the heart and arteries, which was loud enough to be easily heard by my companions, and which the slightest exertion was sufficient to excite. In the present instance I dreaded these effects, and had already begun to feel them in an uncomfortable degree, but was almost entirely relieved by drinking plentifully of vinegar and water, with which our guides, to whom experience had taught its utility, had taken care to be well provided. This drink was extremely agreeable to us; wine, on the contrary, disgusted us. All the water we had, we had brought from the rock at which we slept, where we had carefully collected it from the cracks of the ice: for we were now in the region of eternal ice, where rain never falls, and where the utmost power of the midsummer sun can only soften, in a slight degree, the surface of the snow.

The acclivity we were now ascending was steeper than any we had before encountered, so much so that we could only accomplish it by a zigzag path, advancing not more than a few feet every 20 or 30 yards we walked. To have an idea of our situation, you must imagine us marching in single file on the steep mountain side, placing with the greatest care our feet in the steps, which the hardness of the snow rendered it necessary for our leader to cut with an axe, supporting ourselves with our poles against the upper side of the slope, and having on the other side the same rapid slope terminating below in a precipice several hundred feet in height, over which we saw rapidly hurried all the small pieces of ice that we loosened with our feet. Our situation was similar to that of a person scaling the steep and iced roof of a lofty house, and constantly liable, by an incautious step, to be suddenly precipitated over the eaves. After we had been proceeding in this manner for some time, I looked down on the plateau beneath, for the guide we had left, and when at last I discerned him, like a speck on the snow, my head began to grow dizzy

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at the idea of the distance below me, and I was forced to keep my head averted from this side, to recover from this disagreeable feeling.

Our guides had attached themselves and us with cords, each three persons together, as when passing the glacier. They were provided with large iron cramps fastened to their feet, which prevented them from slipping. Dr. Van Rensselaer and myself had found this contrivance impede too much our walking, and after a short trial had given it up, so that we had to rely on the firmness of foot of those guides to whom we were tied to preserve us in case of our falling. I am not entirely convinced that if one of us had had the misfortune to fall, and were slipping down the declivity, he would not have drawn his two companions, in spite of these precautions, over the precipice. To add to our difficulties, the sun was excessively bright, and almost blinded us, notwithstanding the gauze veils with which we were all provided.

Fortunately, we met with but few crevices; however, on passing one of these that was hid by the snow, I suddenly sunk, but my body being thrown forward by this motion, my breast opposed a larger surface to the snow which thus supported me, and I was easily extricated by a guide. On looking back through the hole I had broken, I could perceive the black cavity beneath.

At one period, our path necessarily led us close under a wall of snow, more than 150 ft. high, from the top of which projected several large masses of snow that appeared to require only a touch to bring them down on our heads. Our captain pointed out our danger, and enjoined us to pass as quickly as possible, and to observe the strictest silence. When we looked up at these

> toppling crags of ice,
> The avalanches, whom a breath draws down
> In mountainous o'erwhelming,

we felt no disposition to disobey his directions, but passed on with hurried step, and in the stillness of death. The inhabitants of those parts of the Alps, exposed to these avalanches, assert that the concussion of the air, produced by the voice, is often sufficient to loosen and bring down their immense masses. Hence, the muleteer is often seen to take the bells from his animals when he passes through a valley subject to this danger. A few years since some young men, relying on the solidity of the ice, and wishing to try the echo, were so im-

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prudent as to discharge a pistol in a large cave which is at the lower edge of the Glacier des Bois, near Chamouny. The shock brought down the roof, which crushed them on the spot.[10]

At 11 o'clock we had passed most of the difficulties, and all the dangers, of our ascent, and reached a granite rock, which appears , or nipple,[11] which forms the summit of Mont Blanc. This rock is only 1,000 ft. lower than the summit. Here we enjoyed a full view of the valley and village of Chamouny, which had hitherto been masked by the 'Aiguille du Midi; and when we recollected the promises of our friends there to watch our progress with their glasses, and were convinced that they were at that moment observing us, we felt relieved from the sensation which we had previously experienced of being shut out from the world. In fact, we learned afterwards that they had seen us distinctly, counted our number, and observed that one of the party was missing: this was the guide we had left at the 'plateau.'

Our final object was now close at hand. We turned, with renewed ardour, to accomplish it; continuing our zigzag path, till, after much suffering from fatigue, cold, and shortness of breath, we stood, at half an hour after noon, on the highest point of Europe!

Our first impulse, on arriving, was to enjoy the pleasure of throwing our eyes around, without encountering any obstacle. The world was at our feet. The sensations I felt were rather those of awe, than of sublimity. It seemed that I no longer trod on this globe, but that I was removed to some higher planet, from which I could look down on a scene which I had lately inhabited, and where I had left behind me the passions, the sufferings, and the vices of men. The houses of Chamouny appeared like dwellings of ants, and the river which flows through the valley seemed not sufficient to drown one of these pigmy animals. These emotions made me for

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[10] [This accident is mentioned in the 1810 edition of Ebel's 'Manuel du Voyageur en Suisse' (vol. ii. p. 371): 'Le 8 août 1797 un M. Maitz de Genève, accompagné de son fils et de son cousin, alla visiter la voûte du Glacier des Bois. Cette voûte s'étant écroulée, ces trois infortunés furent entraînés par les ondes furieuses de l'Arveiron. Un coup de pistolet, imprudemment lâché dans la voûte, avoit déterminé la chûte des glaces.' According to a note in 'La Montagne' (1919, p. 276) by our honorary member M. E. A. Martel, the celebrated grotto disappeared in 1873.]

[11] [Several words have apparently been omitted here in the original text.]

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some time insensible to the cold, but the piercing wind, which here had free scope, soon put an end to my waking dream, and, bringing me back to the reality of life, enabled me to fix my attention on the objects around.

Notwithstanding the pleasure inspired by the view, it was certainly more terrific than beautiful. The distant objects appeared as if covered by a veil. To the north-west was the chain of Jura, with a mist hanging on its whole extent, which prevented the eye from penetrating into France in that direction. On the north was the Lake of Geneva, of a black colour, and surrounded by mountains, which we had thought high, while we were on its banks, but which now appeared insignificant, and the lake itself seemed scarcely capacious enough to bathe in. To the east were the only mountains that appeared of a considerable size; among which, the most conspicuous were the Jungfrau and Schreckhorn in Grindelwalden, and Monte Rosa, on the borders of Piedmont, which raises its hoary and magnificent head to within a few hundred feet of the level of Mont Blanc. The grand St. Bernard was at our feet to the south-east, scarcely appearing to rise to more than a mole-hill's height above the adjoining valleys. The obstacles which Bonaparte had to encounter in leading his army over this mountain, even in winter, appeared so diminished in our eyes, that this vaunted undertaking lost, at the moment, in our estimation, much of its heroism and grandeur.

The view below and immediately around, presented a shapeless collection of craggy points, among which the 'Needles' were easily distinguished. We could hardly trust our senses when we saw, beneath our feet, those rocks, which, from below, appear higher than Mont Blanc itself, and which seem to penetrate into the region of the stars, and to threaten to 'disturb the moon in passing by.' Our view may be compared with that from the top of an elevated steeple over an extensive city, of which, except in the immediate neighbourhood, the roofs only of the various buildings which compose it are to be seen. The only green that we could perceive was the narrow valley of Chamouny, and the two valleys by the side of St. Bernard. The portion of the earth that was not covered with snow appeared of a gloomy and dark grey colour. The world presented an image of chaos, and offered but little to tempt our return to it.

The top of Mont Blanc is a ridge of perhaps 150 ft. in length, and 6 or 8 ft. in breadth. It is entirely composed of snow,

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which is probably of immense depth, and is constantly accumulating. We could see no traces of the obelisk, 12 ft. in height, which had been set up about ten years before. One of our guides was of the number of those who placed it, and designated to us its position. The highest rock which appears above the snow, is a small one of granite, 600 ft. below the summit. We remained but a few minutes immediately on the top, as the wind blew hard and piercingly cold. Descending a few feet on the south side, we were partially sheltered from the wind, and here the sun shone with an excessive brightness, heating every part of the body exposed to his rays; but the least breath of wind, which reached us at intervals, was sufficient to make us shiver with cold. Fahrenheit's thermometer in the sun was 2° below freezing, and 5½° in the shade. It must be considered, however, that we suffered a much greater degree of cold than the thermometer indicated, from the rapid evaporation from the surface of our bodies of the insensible transpiration occasioned by the dryness and great rarity of the surrounding air. This cause, familiar to physiologists, affected our sensations, and could not influence the thermometer. Most of our guides stretched themselves on the snow in the sun, and yielded to the strong inclination to sleep, which we all felt. Only one or two of them ate; the others, on the contrary, evinced an aversion to all kinds of food. We did not suffer the great thirst which Saussure and his party experienced. This we prevented by drinking vinegar and water, which was very grateful to us, instead of pure water. Our pulses were increased in frequency and fulness, and we had all the symptoms of fever. I occupied myself, notwithstanding the indisposition to action which I felt, in making a few observations, and in stopping and sealing very carefully a bottle which I had filled with the air of the summit, intended for examination on my return.

The colour of the sky had gradually assumed a deeper tint of blue as we ascended: its present colour was dark indigo, approaching nearly to black. There was something awful in this appearance, so different from any we had ever witnessed. There was nothing to which we could compare it, except to the sun shining at midnight. During some of the first attempts that were made to ascend Mont Blanc, this appearance produced so strong an effect on the minds of the guides, who imagined that Heaven was frowning on their undertaking, that they refused to proceed. The portion of atmosphere above us was entirely free from the vapours

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which the lower strata always contain, and was truly the 'pure empyreal,' seldom seen by mortal eyes. We had all our life beheld the sun through a mist, but we now saw him, face to face, in all his splendour. The guides asserted that the stars can be seen, in full day, by a person placed in the shade. It being near noon, and the sun almost over our heads, we could not find shadow to enable us to make the experiment.

The air on the top of Mont Blanc is of but little more than half the density of that at the surface of the ocean. According to the observations of Saussure, the height of the barometer on the summit was 16½ in., while that of a corresponding one at Geneva was 28 in. In consequence of this rarity of the air, a pistol, heavily charged, which we fired several times, made scarcely more noise than the crack of a postillion's whip.

We remained an hour and a quarter on the summit, part of which time was spent in useless regrets at not having waited to provide ourselves with instruments, as we were now so admirably situated to make with them a series of interesting experiments. Those which had suggested themselves were principally concerning the absorption and radiation of caloric, and on the degree of cold produced by the evaporation of ether and other liquids. We found the descent more easy and much less fatiguing, though perhaps more dangerous than the ascent, on account of the greater risk of slipping. We passed under the place where the avalanche threatened us with even more caution and more rapidity than before, as we found that a small piece had actually fallen, and covered our path since we had passed by. We arrived in an hour at the 'Grand Plateau,' where we stopped to refresh ourselves, and gratify our returning appetites. We found the guide whom we had left quite relieved. Here the sun, reflected from the walls of snow which surrounded us on three sides, poured down upon us with the most burning heat that I ever experienced from its rays, while our feet, cold from being immersed in the snow, prevented perspiration, and thus increased its power. Wherever its rays could penetrate, as between the cap and neckcloth, or even to the hands, it resembled the application of a heated iron. We were compelled, in addition to the assistance of our veils, to keep our eyes half closed, and even then the light was too powerful for them.

We, however, continued with ease and cheerfulness the descent, until an unexpected difficulty occurred. Where in the morning we had cut our footsteps with an axe, we now found the snow so much softened by the sun, that we sunk in

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it, every third or fourth step, to the middle of the body. My friend and myself were more subject to this inconvenience than the guides, on account of the soles of our boots presenting a lesser surface to the snow than those of their large shoes. After plunging on in this manner for some time, I began to despair of reaching our rock, which was yet 4 or 5 miles distant; but there was no alternative but to proceed. We therefore kept on, though with excessive fatigue. We frequently fell forward, and one limb, being tightly engaged in the snow, was violently twisted, and constantly liable to be sprained, which in our situation would have been a serious misfortune. The crevices, too, were, from their edges having become softened, more dangerous than before. Perseverance and caution, however, triumphed over all these difficulties, and we reached the 'Grand Mulet' half an hour after five, our boots, stockings, and pantaloons completely soaked. These were immediately stretched on the rock to dry, which the heat of the sun soon effected. I had the disappointment to find, on examining my pockets, that the bottle which I had so carefully filled with the air of the summit had been broken in one of my frequent falls, and, of course, my hopes of making with it some interesting experiments were now destroyed. The thermometer was also broken.

Notwithstanding the Herculean labour of the day, and the fatigue we experienced at the time, we had not been long on our rock before we felt strong and invigorated, as if just risen from a comfortable night's repose. This effect of the mountain air has often been remarked. We had even sufficient strength and ample time to enable us to continue our descent with ease to Chamouny; but in the present softened state of the snow it would have been madness to attempt to cross the glacier, which we had found difficult and dangerous the preceding day, even before the sun's rays had affected it. In fact, while two of the guides were looking down on our path over the glacier, they saw a bridge of snow which we all crossed the day before, suddenly sink into the chasm beneath.

Imprisoned thus by the glacier, which was now all that intervened betwixt us and terra firma, we quietly resolved to remain where we were, and made the same arrangements for passing the night as we had done the evening before. We were, however, at present better off: I mentioned that we had been so fortunate as to find a sufficient supply of water in the neighbourhood of our rock, in consequence of which most of the charcoal we had brought to melt the snow

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remained. With this we made a small fire at our feet, and, by blowing almost constantly, kept it up during the night. It has been often observed that, as we ascend in the atmosphere, the difficulty of maintaining combustion is proportionately increased. The cold was, notwithstanding our fire, so great that whenever I fell asleep, I was awakened in a few minutes to shiver and chatter my teeth. Our guides slept in the open air, huddled as close together as possible.

July 13.—The dawning of the day was truly welcome, as it promised a near termination to our toils and suffering, while the gratification of having accomplished a difficult and interesting object remained as a recompense. We left our hard bed without reluctance, and were impatient at the slowness with which the guides made their preparations in packing up their numerous articles. We began to descend as the sun illumined the white top of Mont Blanc, but long before his beams penetrated below. Above our heads the sky was perfectly clear, while the valleys beneath, and all except a few of the highest surrounding mountains, were concealed by a sea of clouds. The appearance of the clouds when seen from above is singular; they resemble immense floating masses of light carded cotton. We retraced our path of the first day, and took the same precaution as then of tying ourselves together. When the sun's rays began to shine on the snow around us, I found that my eyes were so much inflamed, I could scarcely bear them sufficiently open to see the path; notwithstanding the gauze veil I had constantly used, my skin was in a terrible condition: the outer skin had fallen, rendering my skin and lips one continued sore. Dr. Van Rensselaer's eyes were in a worse condition than mine, and his face nearly as bad.

At one part of the glacier where the snow had been so hard at our passing that our feet left no impression, we lost our path, which was a misfortune, as we had chosen a much better path in ascending than we could have done in descending. We, however, fell in with the track of two chamois, which our guides followed with confidence, relying on their instinct, which they attribute to these animals, of finding a practicable path over the most difficult glaciers. When we had at last passed the glacier, our feet seemed to rejoice at once more touching firm ground; and we felt as if returning to the world from a distant voyage. The rest of our task offered no difficulty, being a constant descent down the rocky mountainside, except what was occasioned by our almost

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total blindness, and the pain we suffered in our eyes. It was, however, fatiguing, as the descent from a mountain is generally more so than the ascent to it. We stopped at the same chalet, where two days before we had bid adieu to the world; and were regaled by the old man and his daughters with another delicious draught of milk and cream. We reached the village soon after 10 o'clock in the morning, having been absent 53 hours, during 45 of which we were on the ice. We were received with many congratulations by the honest villagers, who had taken considerable interest in our success.

As soon as my companions and myself reached our inn, we buried ourselves in our chamber to enjoy the luxury of a bed, and of darkness which was necessary for our eyes. It was not until the sun had set, and the twilight was not too strong for them, that we ventured out to regale ourselves with a comfortable meal. Two English visitors, who had watched with a glass our progress on the top of Mont Blanc, had expressed a determination to follow our example; but our account of the difficulties we met with, and still more the view of the condition we were in, soon induced them to abandon the design. We walked out at the approach of night under the 'Needles,' and as we saw these rocks, on whose sides

> . . . the clouds
> Pause to repose themselves in passing by,

and on whose tops the stars seemed to rest, we could scarcely realise the idea that they were the same we had seen only thirty hours before far below our feet.

The next day after our return to Chamouny, our eyes had become so much stronger that we were enabled, without much inconvenience, to proceed to Geneva, where we have since remained to recover from our sufferings. Though now more than a week has elapsed, my face is yet much inflamed; but my eyes have regained their usual strength. Dr. Van Rensselaer has suffered in the same manner, but on the whole rather less than myself. Wherever the sun's rays could penetrate, even behind the ears to the level of the neckcloth, the skin has fallen off, and I have exchanged the tawny hue of an Italian and Sicilian sun, for the fair complexion of a German or Englishman. We have purchased, perhaps, too dearly the indulgence of our curiosity; but, at present, when the difficulties are passed, and the gratification remains, I cannot regret our hardships, especially if I succeed in making you partake of the one without suffering from the other.

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The Traverse of the Aiguille Blanche de Peuteret and of Mont Blanc de Courmayeur—a Memorial to a Great Guide.

By J. P. FARRAR.

(Read before the Alpine Club, June 5, 1917.)

I AM here to-night purely as a stop-gap. I am another of those old goats of Mr. Freshfield's which has to be served up as a reflection of an Alpine holiday. The first of the old goats furnished much good food for reflection, while, as for the arch-goat, he got served up under a wrong name, for he turned out to be the best *pré salé*. Before you get through me, you will find I am only tough cold storage.

I was at first much perturbed to know what to talk to you about. I was inclined to describe episodes of expeditions of my declining years, when I had been beguiled into pursuing the fascinating pastime of climbing without guides. My duties in such a party are very varied. I am required, first, to draw up a programme, and to forget whether I have ever ascended any of the included peaks. I did this once, and we failed to hit the Cima di Jazzi by a full mile. Then, at a modest dinner, I am requested to unfold the plan. This I proceed to do, starting gently and warily as becomes a mountaineer; but, as I watch the ardour of anticipation quicken the austerely ascetic countenance of one of my friends and smooth out the lines of deep thought—caused, I trust, not *entirely* by meditation on the shortcomings of his climbing companion—so my pulse quickens and I measure out the mountains, not by the metre but by the mile. I feel like a Chancellor expounding a Budget, with the difference that the more I demand of my audience, the better they like it.

Still, there are drawbacks to this eminently enjoyable method of making ascents; for sometimes, during the journey, when I am most busy in doing nothing, I am required to get my glass and adjourn to a convenient hillock, where, prone on my stomach, I can examine the scheduled route for the next day. Meantime I observe my taskmaster retire to an adjacent point of vantage and there, with pursed lips and knitted brow,

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proceed to study a small, well-worn, almost greasy book, which at first I took for a book of devotions, or possibly Dr. Watts' Hymns. Still, I reflected that my friend's sins, so far as I knew, were not such as to cause him great tribulation, and by a sort of inductive reasoning, remembering that all *modern* verses, even by a Past President of this Club, to be super-excellent *must* be more or less mystic, I finally concluded that my friend must be immersed in such, and it turned out that the little book was by a man called Browning.

Meantime, my other companion (I am not naming anybody), as I was sure to see out of the other corner of my eye, had felt compelled to undertake the mountaineering education of some fair countrywoman of ours who might be in the neighbourhood. I might mention that even Browning has been known to fail to completely engross my other aforesaid companion on such an occasion, and with such opportunities. Even I myself have at times felt constrained, as the senior and staid member of the party, to abandon my topographical researches so as to make sure that the precepts and instructions were on the sound lines laid down by the Alpine Club for such occasions. If these rules should need bringing up to date, to suit advanced conditions, I feel sure we can find eminent authorities among our members.

You will see, gentlemen, what insidious cares beset the path, not alone on a mountain, of the senior member—one might say the Nestor—of an unguided party.

Now in matters Alpine I confess to a shameless inconstancy. I am equally content and delighted in the Maritimes, among the great peaks of the Central Alps, or in the uttermost parts of Tirol. In past years, when I travelled by myself with a guide companion, at the last moment, wooed by some memory of brilliant half-forgotten scenes, we would, as the lawyers say, completely change our venue.

Still, in my heart, the great chain of Mont Blanc has never failed to assert its pride of place.

Most of us have, in our Alpine career, some outstanding year, an *annus mirabilis* in which everything worked in together—mine was, I think, 1893. I had been absent from the Alps—not, of course, from mountains—for eight seasons, and, with time on my hands, I was able, served by great guides, to make up the leeway in two—one of them was '93.

I have ventured to call the traverse of the Aig. Blanche de Peuteret and of the Mont Blanc de Courmayeur a great traverse, for it is classed by a mountaineer of European repute, who

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has done them both, as second only to the traverse of the two peaks of Ushba.

Moreover, it took us twenty hours of *ascent*, so that it has impressed itself on my memory. Up to date, it has been done four times. The two expeditions which succeeded ours have not included any Englishmen, and have been, moreover, made without guides.

For years a great glamour attached to the Aig. Blanche. It was the last unconquered 4,000 m., and when, in 1882, Professor Francis Maitland Balfour, led by the daring Johann Petrus, neighbour and comrade of Alexander Burgener, came to an untimely end in attacking it, it seemed to put on a mantle of inaccessibility reminiscent of the old Matterhorn days. Whether they actually gained the summit is not known, but an almost equal sensation was aroused when, three years later, the great mountain fell to the attack of Sir Seymour King and his Saas guides, *led*, I think I may say in this case, by Emile Rey, one of the most enterprising guides of his period. I say *led*, because it is certain that the sagacious Emile had had the mountain for some time in his pocket, and was only awaiting an opportunity to put therein, before delivering the goods, something else of greater exchange value. Rey had, namely, already, in 1880, been on the Col de Peuteret, lying between the Aig. Blanche and the Mont Blanc de Courmayeur, with Herr Gruber, whence they had followed the great arête to the Mont Blanc de Courmayeur, and from any point on this arête he completely overlooked the arête which leads from the Col de Peuteret to the Aig. Blanche, and must have been quite certain of its accessibility, as, in effect, it offers no difficulty whatever.

My attraction to the mountain was quite fortuitous. On July 23, '93, Daniel Maquignaz, Christian Klucker and I, then in our best years, lean and fit as dog-wolves, bivouacked for the Brenva route on the well-known rocky island in the Brenva glacier. After arranging, as I well remember, a quite excellent sleeping-place—at the foot of a rocky wall facing south—I became greatly interested in the mighty E. face of the Aig. Blanche directly opposite to us. What I saw is here shown. Another picture by Mr. Hastings, taken before their memorable traverse of Mont Blanc, hangs on my wall. It is obvious that a fairly safe route up it can be traced. On questioning Daniel it appeared that he had once bivouacked at its foot—I think he said with Evan Mackenzie—intending to try it, but bad weather intervened.

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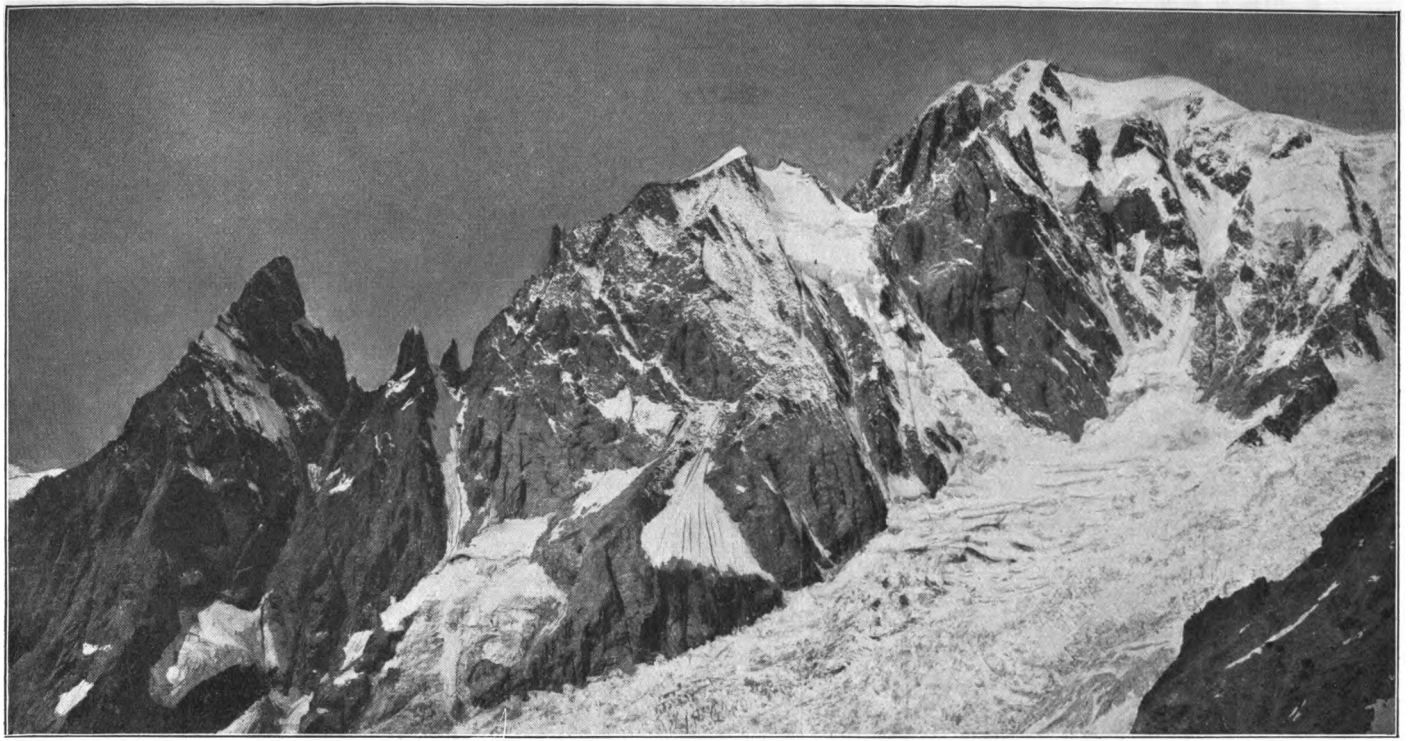


Photo. A. Holmes]

THE PEUTERET RANGE AND MONT BLANC

FROM AIG DE LA BRENVA

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We then and there decided to attempt it, as soon as our plans would let us get back to Courmayeur and the moon and weather would serve.

We did the Brenva all right next day, but bad weather drove us down to Chamonix. We had ordered two porter-loads of provisions to the Sella hut, including a whole leg of mutton and several bottles of Bertolini's good wine. My friend Broome's was the next party to visit that hut and he asserts that when they opened the door they were fairly laid out and rendered incapable by the aroma of the leg of mutton; but I am inclined to believe that their incapacity may have been partly due to other causes; for when, *eleven* years later, we at last reached that hut, fully expecting to find our wine *old in bottle* and perfectly *frappé*, we found the cupboard bare. Daniel and I, on that occasion, were snowed in for three days in the great blizzard of August 21–23, and finally, after dividing our last scrap of provisions—one solitary egg—had to force a descent in a metre of snow. 'Ces coquins de voleurs qui ont bu notre vin!' was his main refrain.

After the Brenva, once at Chamonix the Aiguilles kept us busy for several days and Klucker had to join Güssfeldt, when one day, to our great astonishment, Kesteven and Marshall brought the news that they had met Güssfeldt with Rey and Klucker on Mont Blanc, having done the E. face of the Aig. Blanche and followed the arête to the Mont Blanc de Courmayeur and Mont Blanc. They described the whole party as tired out after three days' work. Perhaps I had a slight qualm, but, after all, if the mountain belonged to anyone, *that man was Rey*. Moreover, I have never been of those epicures whose mountain tastes are so jaded by experience—or possibly so undeveloped, owing to ignorance and inexperience—that nothing but the caviare of new ascents could find favour. Every ascent that I have not done is a *first* ascent *to me*; and even when I have followed the delightful practice of repeating an ascent, I have never failed to find some fresh delight—some new perfection. So we hardened our hearts, Daniel simply remarking: 'Nous le ferons assez.' Still, as Sir Martin Conway told us the other day in a remarkable paper, there is a vast difference between a matter-of-fact belief that *of course* you can reach a certain spot and the uncertainty when it never has been reached.

Güssfeldt's ascent had made a tremendous impression in Courmayeur. Not a guide then there would look at it—you might as well ask him to give you his best cow. Even porters

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to the bivouac were hard to be got, and demanded 50 francs per man and not less than three men. Daniel naturally bethought him of his relatives in Val Tournanche, the cradle of many hard mountaineers, and of three men whose names will go down for all time as great masters of the craft. We accordingly telegraphed to Jean Baptiste, Daniel's cousin, then about thirty, the elder son of the famous Jean Joseph Maquignaz. Baptiste had traversed Monte Rosa in winter, and was reputed one of the strongest and hardest guides in the Val Tournanche. Meantime we heard that, on his return from the expedition, our former companion Klucker had said that had he been with us instead of with Dr. Güssfeldt we should have got to the top the same day.

Baptiste arrived, prepared to go anywhere or do anything with Daniel as leader, and on August 26 our imposing caravan of six men left the Royal at 9.30 A.M. and reached at 6.20 the rocks at the foot of the Aig. Blanche, after some difficulty in crossing the Brenva Glacier. We made a bivouac on a ridge running due E., each one finding his own gîte. I remember mine was a kind of tomb. Next morning the three of us were away at 4.40 before daylight. We had to cross the ice couloir which serves as a shoot from the S. arête of the Aig. Blanche, and so ascended our ridge of rocks with the couloir on our right hand, until we reached at 5 its narrowest point. Daniel thereupon proceeded to cut across it, while we kept a very wary look-out for anything falling. Now and again small bits of ice came whizzing down, but at 5.15 we were all safely across, Daniel having cut twenty-six steps in hard ice. We then took to the rocks on the other side—these form a broad broken-up arête, or rather convex face, nowhere offering any great difficulty, the rocks being much broken but good, and the holds firm. We traversed continually in a northerly direction and had to cross two stone couloirs which might be dangerous later in the day. My note is 'exposed.' I take it that it is these which held up for some time Blodig and Compton, when they made in 1905 the first *descent* of this face. We then turned W. up a tolerably defined rock-ridge and sat down to breakfast 6.35 to 7. Weather perfect—no wind. The end of this rock-ridge came at 9.30. We had had no difficulty—just ordinary care required—and we had now to traverse away to our left across an ice-slope. Here, for the first time, we saw signs of our predecessors in the shape of half-melted steps in ice. I think Dr. Güssfeldt says his people cut seventy, but we saw at most twenty.

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Daniel cut out the half-melted steps, and twenty-one minutes later, at 9.51, we were on the summit of the Aig. Blanche, an exquisitely delicate little point, the apex of four snow arêtes—4,109 m. is the height—nearly 13,500 ft.

We had only taken 5 hrs. 11 mins. including twenty-five minutes' halt, and were overjoyed at our easy and quick triumph. Still, the arête leading to the Mont Blanc looked terribly long, while on the arête of our mountain leading to the Col de Peuteret there were two great ugly gendarmes which looked awkward.

There was little room and no rocks on the summit, so after five minutes' halt we started down the steep up-and-down snow and ice arête towards the Col de Peuteret until we reached an outcrop of rock where we made a long halt to eat, 10.20 to 11.5.

The first gendarme we turned on its right; the other we climbed right over, and leaving the arête by a short gully on the Fresnay side we traversed back to the arête over some steep ice, and were in the Col de Peuteret at 1.15. We reckoned the Mont Blanc *down and out*! We were at a height of nearly 4,000 m. and so had still rather over 2,500 ft. to the top of the Mont Blanc de Courmayeur, but a *long, long*, arête.

This Col has, properly speaking, been reached but twice, and then from its W. or Fresnay side by Rey and Gruber, in their great expedition of 1880, and by Rey and Sir Seymour King's party by a somewhat different route in 1885. The Col has never been crossed; its E. side, unless the séracs alter, is out of the question.

Mont Blanc de Courmayeur from this side was first tried in 1874 by T. S. Kennedy, T. Middlemore, with Joh. Fischer and Jaun, and a little later in the same season by J. A. Garth Marshall, with Fischer and Ulrich Almer. Descending the Brouillard glacier at midnight, Marshall and his guides fell into a crevasse, Ulrich, whom nothing apparently can kill, alone escaping. They were probably aiming at the Col Emile Rey, then, of course, unknown and unnamed.[1]

Mr. Eccles makes mention of the gigantic slabs of this S. face.

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[1] In January 1920, Dr. Claude Wilson saw Ulrich at Grindelwald. Ulrich states that his party in 1874 followed the arête between the Fresnay and Brouillard Glaciers to the point where the two glaciers join and then a little up the rocks where they had to bear somewhat to the left. But the rocks were *schneebedeckt*, and they soon had to turn back.

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Still, in my opinion, to the E. or right of these the face is much broken and there must be a route.[2]

We spent only five minutes on the Col. The arête leading to Mont Blanc is at first a snow arête, and as (for the first time that day) Daniel started *kicking* steps, my constant optimism fairly overflowed. 'En trois heures nous sommes au sommet!' Daniel, turning round with a dubious smile, answered: 'Espérons!'

The snow arête only lasted twenty minutes, and the axe was at work before it came to an end. At 1.50 we took to the rocks on the right and gave ourselves ten minutes. Below us, deep down on our left, was the great couloir, not looking very inviting, up which Michel Payot had led Mr. Eccles in 1877. Still, nothing fell down it all day. We continued on good rocks below the arête to the left, then got almost on to the arête, but descended a short traverse to the left of a big tower and came, all of a sudden, on Güssfeldt's second bivouac under a big rock on the Fresnay side, 3.33—a fresh-labelled empty bottle of Graves was the only sign of human passage. There was only room for one man to lie down—the others must have sat or stood. Klucker told me afterwards that they had felt the cold badly, especially down the front of the thighs. I have myself remarked the same feeling, and I see it mentioned in 'Camp Craft' lately reviewed in 'A.J.'

A deserted bivouac place, on a route which has been but rarely done, always seems to me to have something pathetically human about it, and I have gazed with a never-failing interest on similar places in many parts of the Alps, relics of a period of mountaineering now fast fading. However, we were by now in full cry, and traversing 10 yards along a wall, we turned sharp to the right up a steep chimney—the only real foot-and-hand climbing worth talking about the whole day.

Traversing away to the right, we gained the arête at 4.25, and we saw now what we were in for. A sharp, steep, ice arête, with jutting-out rocks, corniced in places, led upwards, seemingly endless. But there was more than this. As far as the Col de Peuteret the weather was perfect—warm—no wind, but now we could see that over the top of Mont Blanc was blowing a northerly gale. We were still too low down to feel its effect, but higher up we could see the bits of snow and ice blown off the arête, and we had a shrewd suspicion that a bit later our turn might come.

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[2] This route was done 1919 by Mr. Oliver and Capt. Courtauld, as related elsewhere.

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Daniel, always at the post of honour, bent his back to the axe, and literally for hours we progressed at a rate that you understand as well as I do is, in these conditions, *painfully* slow. I had relieved him of his sack already much lower down, and Baptiste carried mine and his own. The ice was not that hard blue ice you often read of, but seldom meet, but a white weathered kind, which required quite careful treatment with the axe on a narrow arête. You needed only to give one glance at the sharks' teeth with which the very steep slope on the left was sown to keep your attention at full pressure. A slip would have sent our whole party bumping down the slope, and the sharks' teeth would have literally *shredded* us to bits—like passing through the teeth of a sausage machine. I see the place now, almost with a shudder!

I do not remember that we stopped to eat—we carried raisins and sugar in our pockets—but once, for a moment, Daniel half reeled with the continuous work—he had been leading for *fourteen hours*. We restored our leader with some wine and food, standing in our steps. About 6 an occasional downblast of wind gave us a warning of what was in store. It was still light, and once more Daniel set to work with the axe. But each step brought us more into the wind, and soon, every other minute, we heard the howl as of a thousand wolves, and, quickly jamming in our axes, bent our backs in mortal fear of being blown clean away. I exchanged, now and again, a few words with the usually loquacious Baptiste, but only in the intervals could one make oneself heard. We hardly noticed the daylight vanish, for it was full moon or nearly.

At about 10 the arête opened out to form a sort of rocky headland. I was rather keen to stop there, although the shelter was of the scantiest, as the quickly recurring blasts of the hurricane were becoming trying in the extreme. However, we faced it once more, always step-cutting, until, about 11 P.M., we could take to some rocks on the left and climbed a broad rock couloir, which gave the leader some relief. Baptiste had for some little time been complaining that he could not feel his feet. There was nothing to be done but to stick steadily to it.

The rock couloir ended in a snow arête, when the wind seemed to drop. Thirty yards higher Daniel halted, and looking up in the half light I saw he was under a great cornice. It was just midnight by my watch. We brought up Baptiste, so that we should not be knocked over, and Daniel proceeded to flog a passage through the overhanging lip.

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I closed up to him, and he half scrambled and was half pushed through the hole. I followed, helped by the frozen rope. Almost before I could look round, and see that we were on the top itself, the frightful N. gale almost beat us to the ground. Baptiste followed and for a moment we clung to our rammed axes, gasping for breath. Daniel, as ever, the quickest to pull himself together, beckoned (the wind drowned even a shout) to get under the lee—one could not call it a shelter—of a little outcrop of rocks a few yards further on. Round one of these Daniel flung the rope, and we huddled down on the snow; for facing that gale—even across the broad, almost level, arête leading to Mont Blanc—would have meant an accident. He and I put our feet in our sacks, regardless of the contents. We made signs to Baptiste to do the same, but he would sit on his sack and kick his heels against the snow. There was no arguing with him—one could not make oneself heard shouting. We could not eat, for one dare not take a glove off for a moment.

Those of you who know the desperate misery of such a night need no remarks of mine. As to you others, I only hope you may not have any such experience.

The only part which seemed to retain any pretence of heat was the stomach, over which one fondly clasped the arms.

All night long the hurricane continued, clouds scudding across the moon. We now and again exchanged a sign.

There we crouched for five mortal hours, and even when broad daylight came, one felt little inclined to stir and face the full force of the icy blast. However, at 5.5, Daniel and I scrambled to our feet. Baptiste asserted that his feet were frozen and that he could not move. With a little encouragement he managed to stand up, and we fairly towed him across the summit of Mont Blanc, passed at 5.35, whence we ran down in 13 minutes to our quarters of a fortnight earlier, the hut on the Rochers Rouges. There was at that time, of course, no observatory on the summit, nor a Vallot hut.

No one was there in such weather. Daniel and I were none the worse—of course our boots were hard frozen, and as I took mine off, icicles which had formed round the toes *inside* the boots fell out. With Baptiste it was quite different. We undid his boots and pulled off his stockings. His feet, half-way up to the instep, were the colour of a paraffin candle. Both the men had seen frost-bite before—to me it was new—and they seemed to think, with rubbing, he would soon be all right again. It appeared he was wearing *new boots*.

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I will not tire you with details. The porters engaged in carrying up the building materials for the observatory arrived on the second day, and we got our man to Chamonix on a sledge. I put him up at Couttet's, with an attendant to see to him. Joseph Couttet was very obliging, and made me eventually a very moderate charge. Others did not. He eventually lost all his toes, as dry gangrene set in, but the next autumn we were after chamois in the Val Tournanche, and he was equal to the best of us, and never seems now to feel the difference.

One of the pictures shows the hero of this expedition, as of many another, in a state of content—the day's work done.

It is probably the greatest single-handed bit of leading in the Alps. This paper is a memorial to my great leader.

While we were detained at the Rochers Rouges, who should arrive but C. E. Matthews, on his twelfth ascent of Mont Blanc, accompanied by Melchior and Auguste Cupelin.

It may interest you to know what the first ascent cost. Dr. Güssfeldt gave Rey 600 frs., Klucker 400 frs., Ollier 250 frs., and his porters 150 frs., so that, with provisions, his expenses must have been at least £60. I should be sorry to say what mine were, as Baptiste was laid up nine months.

There is nothing of great interest about the ascent, nor any difficult rock climbing, but I think it will always be very long. I dare say the wind cost us two or three hours. There is no reason why it should not be repeated, but the members of the party had *better* be very fit, and the weather *ought* to be without reproach.

Daniel and I were on Mont Blanc again in 1898 and in 1904, but it was not till 1907 that I saw the scene of our adventure again. That summer, 'long man' Rolleston, Cajrati, and I, at the end of a good season, slept at the Midi Hut. In the morning one of them got up and announced that the weather was doubtful. Accordingly, as I never mind waiting two or three days in a hut, I did not budge. Whether my conscience smote me or not I forget, but a little later I *did* get up and had a look out. The weather was a bit overcast, but, happening to cast my eyes down to the right, I beheld on the glacier below *lines of lights*, and it dawned on me that these were the 'voltigeurs' from Chamonix en route for Mont Blanc. There was not much peace in the hut, or any more rest for the weary then. My companions assert that we went to the top of Mont Blanc under five hours, taking an hour from the Col de la Brenva. I kept no times, but when there were any remarks I dropped a couple of raisins in the track as a peace-offering.

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Now, Cajrati is a great man with the ladies, and at Courmayeur we had been—I will not say *envious*—witnesses of several interesting leave-takings with his fair countrywomen. On the top of Mont Blanc he professed to have had enough, but we were not to be gainsaid, and tying him up between us we rattled across to the Mont Blanc de Courmayeur, so that he could behold the village and salute his interesting companions as he had promised to do.

Tightly held by the cautious 'long man'—a pre-eminently sound mountaineer—I flogged a notch in the cornice, and lying down gazed with much interest on our route of 14 years before—it dipped too steeply to show me much, and I failed to identify the outcrop of rocks where we spent that fateful night. I can see it clearly in my mind's eye.

Returning to the summit of Mont Blanc, I led off, in pursuance of a long-cherished plan, down the Ancien Passage. We wore crampons and were on the Grand Plateau in 50 minutes, having had hardly a step to cut. It is very slightly exposed for two or three minutes at its foot, but there was a north wind blowing, and in such circumstances it is still a better route than the Bosses or the Mur de la Côte.

That was my last ascent of Mont Blanc. I still cherish a hope it may not remain so, as my Sella Hut route still defies me.

Daniel, as you know, lies at peace under the Church of Val Tournanche. About his name twine memories of some of the completely happy days of my mountaineering life. A Great Comrade never dies—he only goes before.

Surely the great charm of the mountains is the exquisite memories they leave us. We may grow old, but we can draw on great days of the past—can recall many a good comrade, cheerful in hardship, staunch in danger.

I sometimes think that it is not the actual expeditions, but rather the refined memories of them, purged of fatigue and hardship, that we really love—that it is *when the stress of the doing has merged in the peace of the done, that we know the supreme delight!*

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Compensations.

By GEOFFREY E. HOWARD.

(Read before the Alpine Club, February 3, 1920.)

THE only reasonable excuse to be offered to this Club for a paper not illustrated by a lantern is that it shall be short. A lantern covers a multitude of sins, the darkness hides the reader's blushes, while the feeblest orator can atone for the poverty of his ideas by judiciously borrowing slides from the best quarters. But apart from the fact that my remarks will be agreeably brief, I really cannot tell you what possessed me to offer this paper. Perhaps it was largely because I have come to the conclusion that there must be other people who suffer and enjoy much as I do, but they have a natural shrinking from declaring themselves: and such persons, if really right-minded, ought to shrink. Personally I am not right-minded, and have come to the conclusion that I will state my case.

I find it assumed by dwellers in flat-land that, because I perpetually wander among the mountains, I must therefore be a man of iron nerve. If by chance it appears that I am a member of this Club, this fallacy promptly blossoms into fantastic flowers of conviction which I find make an exceedingly embarrassing garland. When I try to explain this, I am asked: 'Then why in the world do you climb?'

Well, I don't; and that is a fact. I know that this may seem rather an awful confession to make, because we all like to think that we have nerves of iron even if we have not. But there it is: I have little or no head; I die several deaths on a mountain; I am often half strangled by the beating of my own heart. Every time I am in a moderately unpleasant place, I swear that I will go to Brighton for my holidays and play chess. And next time I go back to the mountains!

For long I conceived myself to be a kind of Alpine pariah, and have shrunk from confessing my shortcomings. This I have always supposed to be due to exquisite modesty on my part, but now I am not sure that it was anything but a nasty form of self-conceit, because I suppose that we all do suffer in a greater or lesser degree.

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George Borrow tells of one who spent years of agony because he thought he had committed an unforgiveable sin; and yet, on the mere suggestion that probably many others had done precisely the same thing, completely regained his mental equanimity.

As I take it, some fortunate individuals are endowed by nature with a kind of physiological gyroscope which enables them not only to stand upon steep ice-slopes and look down sheer precipices with entire placidity, but even to find exhilarating enjoyment in the process. Alas! in constructing me, nature omitted this ingenious piece of mechanism, and if for many years this omission has made me feel that I moved among you under false pretences, to-night I will make a clean breast of it.

A. reads a paper describing the most glorious day he ever had—a horrible experience on black ice at 48°—eight hours of it—grand work. B. tells of the perfect delight of ten hours up a face with hardly a ledge upon it for a brief rest and the snatching of a hasty meal. I have sometimes gone home and kicked myself. 'They *enjoy* it,' I have murmured, 'and you, you miserable creature, would have been in an agony!' At first, with the enthusiasm of youth, I tried to imitate them; later I sank to mere envy, but now content myself with a frank and profound admiration.

Confession is good for the soul. I am no climber. Nay, often I am a trembling alarmist: Dante-esque dreams disturb my slumbers in the hut. Once fairly launched upon a course of self-castigation, I will even admit that some of the happiest moments of my life have been when, halfway up a rather stiff climb, all have agreed that a return was inevitable. And the curious thing is that at that moment I become as one of you. No matter how difficult the descent, all sense of nervousness departs, and I come down with ease and assurance—my face, of course, set in the sad, stern lines of a bitterly disappointed man.

Before leaving this melancholy subject and passing on to the brighter aspects of my character, I would say that climbing nerves were recently given a mathematical definition by a Flying Cadet which I now often apply with entertaining results. I was taking him up his first mountain, and at one point he diverged for a few yards to climb a very steep snow-slope to examine the foot of a chimney. On turning to descend, he visibly hesitated and shouted in the vernacular, 'This rather puts the wind up me.' On rejoining me he added

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thoughtfully, 'That slope was just beyond my angle of wind.'

It is instructive to get a party to compare notes on various slopes of various consistencies. I suppose that as a matter of fact all but an exceptionally gifted few have their own angle of wind. Climb diagonally up a gradually steepening snow-slope: at one moment you are as unconcerned as though you were walking along Savile Row; at the next something happens inside you. I do not mean that you necessarily become nervous like me, but you become alert, you must plant your feet with attention—oh, it takes a hundred shapes!—but, at any rate, your mental attitude changes. The pitch of the slope has suddenly reached your angle of wind. Mine is a lamentably low one, but if for that reason I have, in a sense, to garb myself in a white sheet, then do I boldly demand that it shall have a fair border of flowers, that it shall smell of myrrh, aloes and cassia, as befits the spouse of a pleasure of the soul which no one shall deny me. For if my knees are weak, my back is strong. If chimneys are anathema, arêtes and ice-slopes a nightmare, the mountains still hold a glory of which the most terrified may drink to his full.

No, I do not refer to those who sit upon verandahs, or pause during their tennis to gaze aloft and twitter about grandeur and God's noble works. I mean the person who, after much labour and sweat of mental misery, realises that he simply cannot climb in the accepted sense of the word, but yet adores the high places with such a sweet passion that he must for ever be leaving the plains and struggling upwards to get among rocks and snow and good bare nakedness. He has no set reason for this which he can absolutely explain, any more than that man can quite explain just why he adores that one particular woman—whom you and I, by the way, may possibly consider a singularly dismal female.

The first climb I ever did was the Tschingelhorn. By the time I reached the top I knew two things—that nothing in the world can ever compare with the joy of being on a mountain, and that nothing short of a miracle would ever make me a climber. Since then, for some twenty-four years, I have never missed a chance of going up mountains—not climbing—bundling up somehow; often suffering acutely, more especially at first, when I tried to . . . let me see . . . I fancy 'swank' is the only apposite word. Now, in the mellow forties, I have ceased to pretend, especially to myself: and every man is at once his own sternest critic and his most gullible dupe.

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And yet, as the years go on, I realise more and more how much I owe to my absurd inability to enjoy a ledge or even to stand with serenity in a correct attitude in ice-steps.

I find on mature consideration that I have been compensated so richly that I have not only ceased to repine but am positively grateful for my feeble equipment. For why? Finding myself a joyful slave to the mountains, a very mountain-maniac, unable to pass by even one alluring rock, I was forced willy-nilly to wander in search of those forms of the drug which allayed my fever without reacting upon my nervous system, and have been thereby driven into strange and exquisite places, many of which offer few attractions from a climbing point of view pure and simple.

There is a valley in the Pyrenees, or rather a cañon, with a thousand feet of forest sloping steeply up on each side and above—four thousand feet of sheer rock. A foaming torrent runs through it, and in a meadow on its bank stands a small white hut. Here I have spent halcyon days scrambling to the top of the Mt. Perdu or to the Brèche de Roland, wandering among the grim rock plateaux, and again just lazing in the silent valley. So sylvan and remote was that happy spot that once we rashly decided to be truly Adamic, and for a whole day doffed all clothing and returned to nature. But nature would have none of us and sharply reminded us of our obligations to civilisation by peeling us from head to heel—a most agonizing process. But even so, we could lie under a bower of beech leaves and eat wild raspberries and fresh trout, and blink lazily, and make plans, and wait in a rapture of expectation for the sinking sun to turn our great walls into sheets and towers of flame.

From the Val d'Arrassas to Andorra seems a natural if a somewhat lengthy step, for once you have penetrated to the hidden, almost secret valleys of the Pyrenees you are insatiable. There is something peculiarly remote and strange in them. In Andorra, indeed, the wild, independent inhabitants add to the feeling, and the wearisome journey through gorges and by dizzy paths brings you insensibly back into the world of Washington Irving and his tales of raids and night-rides. Indeed, in some ways the deep-set ravines here seem a truer stage-setting for him than his own mountains in the south. The Sierra Nevada in their savage nakedness, with their vast expanses of terrible scree, unrelieved by any vegetation, seem more fitting to be the haunts of great scaly prehistoric monsters than of knights of chivalry.

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To stand on the summit of, say, the Veleta and watch the dawn lighting up that terrific desolation is almost horrible. Even in the mountains of Sinai the utter barrenness is relieved and made exquisite by the marvellous play of ever-changing colour; but no mood of Nature ever seems to lighten the awful depression of the Sierra in summer when the snow is gone. To spend a week there with the brazen sun by day and the biting cold by night, an occasional shepherd or wandering thief your only links with the world, is an experience which would touch the sublime did not the incidental small discomforts perpetually bring one back to the ridiculous.

I cannot leave Spain without making my bow to the most astonishing mountain I know, namely Montserrat. You will shudder when I remark that a funicular railway takes you a good part of the way up. Worse still—when I visited it I did so in company with some thousands, for it was a great feast-day, and the convent which nestles in a vast cleft was teeming with pilgrims coming to venerate one of the innumerable black images ascribed to the chisel of that most indefatigable sculptor, St. Luke. Indeed, if one accepts as authentic all the carving in Spain attributed to him, one can only marvel that he found enough spare time to write a Gospel, to say nothing of the Acts. But further on one could wander in solitude among the fantastic towers and pyramids; here a dark track, between unimaginable masses of sinister crags, ends suddenly at the tiny rock-hewn cell of a mediæval hermit; here you scramble through stunted junipers and up over what seem to be the dismembered limbs of some infinitely huge stone monster. Awesome cracks twist downwards and end in black abysses two thousand feet below. It is as though some stupendous and half-witted giant before the beginning of Time had dumped upon the flat plain a mass of plastic material and started to model it into sugar-loaves and great smooth shapes; then suddenly he would smash or crush it in meaningless fury, and tear it with huge hands. At last it is as if with one final burst of maniacal rage he plunged his club into the middle, leaving a vast hollow surrounded by nightmare pinnacles and meaningless cones. As one looks out from the highest point it is like looking over the sea, for Montserrat springs quite suddenly out of the great plain, and a stormy sunset from there is an ineffaceable memory.

One is almost surfeited with accounts of how the terror inspired by mountains caused our forebears to suppose them to be the haunts of dragons and devils. The Greeks knew

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otherwise, and just once I had a vision—a vision of Pan himself. Oddly enough, this was in a most unclassical spot, five thousand miles from Greece. Tucked away in the Selkirks in the Canadian Rockies, a Sabbath day's journey from the railway, I found myself one perfect evening in a little glen—a cup high-pitched among the big mountains. Stately trees rose to mysterious heights, and the soft green ground was knee-deep in moss and a myriad flowers. A score of bubbling brooks murmured deliciously, and, sitting down, I was soon lost in a half-dream. Imperceptibly I began to hear music; then, clear as a bell, a voice called and another answered with low laughter. Bright eyes twinkled at me through the flowers, and as I sat motionless, tiny forms slipped to and fro, half seen and yet wholly elusive. I ceased to be sensible and gave myself up to the magic of the moment. Pan and his nymphs were there, and for a flash of time I was with them in their age-long gambols.

That night I felt very foolish, but next day, wandering there with an old trapper who had a shack among the trees, I shamefacedly confessed. He did not laugh: men who live in the mountains only laugh at those who regard them as nothing but tiresome obstacles.

He told me that when he first went there with one companion they constantly had the same idea. Twenty times a day each would think the other was calling and, as he expressed it, they would 'see things.' It may be that common-sense explanations of caves and running streams beneath the ground, and of thousands of bright-eyed marmots which swarmed there, will satisfy the scientific, but for my part I am content with the magic illusion of that moment; and the man who always calls upon his heritage of higher education to shatter his illusions can never hope to drink to the full of the treasured nectar which the mountains distil in secret for those who woo them with the ecstasy of lovers.

The Canadian Rockies bring me a thousand thoughts and a thousand compensations. The sense of self-dependence there can hardly be found in European mountains. True, you must have ponies, a packer, a teepee, and some store of tinned food. But otherwise a sharp axe, a ·22 rifle, some crude fishing apparatus and plenty of matches are the keys to Paradise. You wander through primeval forests, camping where you will among the larches. Cut your quota of young trees for tent-poles, fire, and bedding, shoot a few 'fool-hens' for the pot or catch half a dozen fish, and you are primed for the next day's advance into the unknown.

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I know of no joy quite comparable to that of pioneering. I do not mean the joy of the man who first conquers a peak essayed in vain a score of times by those less skilful or less fortunate than himself—that must indeed be to drink with the gods. I mean rather the strange and stimulating range of thought called forth by the knowledge that your foot is the very first to tread any portion of the crust of Mother Earth. Sometimes on some otherwise insignificant excrescence I have lain and dreamed. The mind ranges back over the history of mankind, over the vast epics of teeming Assyria, Egypt, Greece, Rome, and mediæval Europe. Through it all, this spot of earth was waiting, waiting for *you*. When Babylon fell and Rome burned, this stony virgin waited, cold and serene, until æons later a frightened cockney claimed her all indifferent. Sometimes my mind has jumped impishly from point to point in history, following the same train of thought. When Moses lay in the bulrushes, when Penelope spun, when Alfred burnt the cakes—yes, even when Hervey meditated among the tombs, this stony or snowy lump was still here, still waiting.

None of you who have felt the spell of mountains will condemn me for this, which to me is a perennial source of wonder and delight. It seems to emphasise the aloofness of high places—their purity from the horrid vulgarities of man, and the crying need that men should tread them with awe and wonder and love in their hearts, and not with the idea that they are merely a means to an end.

One groans to note a tendency in some quarters to make of them what our good friends call a 'stunt.' I remember once dining at a London restaurant after a journey to the Rockies and discussing my experiences with a friend, when a person at the same table, with a rich red beard and a burning eye, eagerly joined in the talk. He was 'reel struck on those Rockies.' Was there any money in them? We vaguely opined that they must contain undeveloped mineral resources. 'No, no,' he cried; 'I mean, would they be the goods for cinema work?'

Alas! this 'stunt' idea is not confined to photography. Who does not shudder at a great deal of the modern writing about mountains and climbing so obviously penned with the single motive of being a good seller? It is difficult to say what impression it makes upon the reading public, but to me these wonderful effusions seem to be neither fish, flesh, fowl, nor good red herring. The climber who reads them to learn the route is bewildered by the endless asides, the flowers of

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eloquence and quotations from the poets; the pure neophyte is at a loss to gather whether the expedition described is unspeakably dangerous or a careless jaunt; while the film of ghastly facetiousness spread over the whole narrative reduces the humorist to tears.

For long I hesitated between Norway and Scotland as a happy hunting-ground, and while I suppose the former must bear the palm, it often strikes me as extraordinary that many mountain-lovers are so indifferent to those of our own land. No—I was wrong about Norway; nothing in the world can surpass Skye. But I will not presume to trespass on ground so richly covered in a literary sense by the infinitely eloquent pen of our President. No one has so successfully crystallised into words as has Professor Collie the glorious sensations conjured up by the Coolins. Perhaps few have been wetter or colder or more frightened there than I have, but you cannot beat them. Go to them, and you will never rest until you have been again and again. It is partly, perhaps, their unexpectedness, partly the exquisite mingling of mountain and sea—I do not know; I only know that they are absolutely glorious.

But I will not attempt any further catalogue of the confused ideas which the mountains pour into my irregular and disorderly mind. The odd fancy which drove me year after year in early spring alone through the stony wilderness of the Larig Ghru in the Cairn Gorms is just one more example of that pleasant form of lunacy which those who have never had the spell of the hills upon them cannot understand.

People scoff at us because we go, let us say, for two days to Westmoreland. Well, I admit that it is from their standpoint a kind of madness, but in the same breath I also admit that I am exceedingly glad to be mad. It is only the absolutely sane who have no pleasures, who lead dull, orderly lives without illusion or contrast. For my part I would rather ask, Have we, who live here in London, in the flat squalor of the unlovely houses, amid the din of shrieking traffic—have we ever really drunk deeply enough of the marvellous knowledge that, by sleeping for a single night in a train instead of in bed, we can wake among the hills and the snow and the abiding marvel of them? Of course we all know it and do it; but do we realise the full joy of that knowledge? Every time it comes to me afresh with an almost stunning sense of wonder.

To find oneself quite suddenly wallowing up a snow-slope —not a very steep one, I beg of you!—after a long day in a London office, is a miracle. Somehow it seems to me far

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more fantastically delightful than when you find yourself with equal suddenness by a river, in a forest, or on the sea.

And it is just this miraculous feeling of contrast which makes the high places an end in themselves, even to the vertiginous —an incomparable inspiration, the cup which holds the finest vintage which life pours for those who love the wind and the sun and the great accidents of nature.

This I can only explain by returning to the idea, which I still cherish, that among the hills, great or small, you get back nearer to the old gods, to the beginnings of things, to strength and peace and a wholesome sense of the exceeding littleness of the trifles which absorb and stultify our foolish hearts.

A Veteran of the Club.

ON July 29 last Mr. E. T. Compton, the artist so well known to members of the Club, completed his threescore years and ten, and was fêted by his neighbours at Feldaffing, in the Bavarian Highlands, where he has lived for many years.

Mr. Compton has devoted himself to Alpine painting for over half a century, sometimes spending hours at an altitude of 11,000 feet to catch a sunrise effect, and for nearly forty years has been an active member of the Club. Fifty years ago he began climbing, with his brother (also now one of the older members of the Club); and his residence in the Bavarian Highlands gave him exceptional experience of the mountains in all conditions.

During the war he was under some restrictions of a very mild kind. At one time he obtained even from Berlin a permit to paint on the Austro-Italian frontier, but the permit was turned down by the Government at Munich. Permission was given him, however, from time to time to snatch a few days among the mountains where no fighting was going on. His latest climb (which was also one of his earliest) was that of the Gross Glockner, shortly after attaining his seventieth birthday. Official deputations waited on him, and he was made an honorary member of his original section of the D.Ö.A.V. and presented with a medallion portrait of himself in relief, bearing on the reverse side a reproduction of his Royal Academy painting of the Jungfrau.

It is interesting to learn that the German and Swiss Alpine press contained friendly references to an Englishman even in 1919.

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THE ALPINE CLUB OF CANADA.

THE following letter has been received :—

DEAR MR. MUMM,—On behalf of the Alpine Club of Canada, and on my own behalf, I extend to the Alpine Club through you a most hearty invitation for a party of twenty of its members to be our guests in the coming summer at the Club House in Banff and at the Mount Assiniboine Camp.

We are at that time to officially welcome home members who were on active service, and we shall appreciate greatly the honour of having with us, upon an occasion so important, a large Alpine Club party.

The inclusive dates for holding the camp have not been fixed. It will probably open on July 24, and continue until August 7. About this, however, Mr. Wheeler will presently give you exact information.

None of us have forgotten the great pleasure that was ours in having Alpine Club members at the camp in 1909, and we shall await with lively interest the receipt of a letter from you to advise us that we may have an opportunity at our Welcome Home Camp to renew friendships formed in the Lake O'Hara days of pleasant memory, and to welcome many new friends from across the water to our mountains.

With most kind personal regards, I am,

Sincerely yours,

J. D. PATTERSON,

President, Alpine Club of Canada.

Woodstock, Ontario,
January 23, 1920.

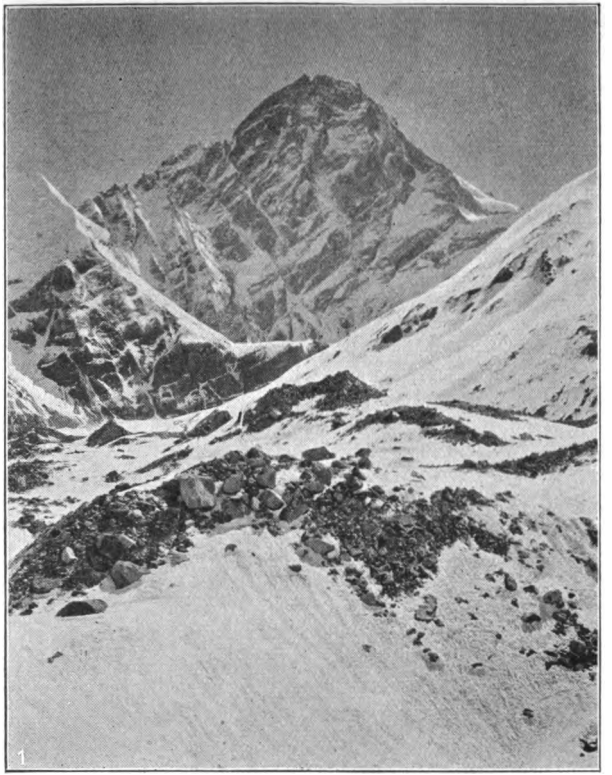
Members who might find themselves able to accept this invitation can obtain further information from Mr. A. L. Mumm, at 23 Savile Row.

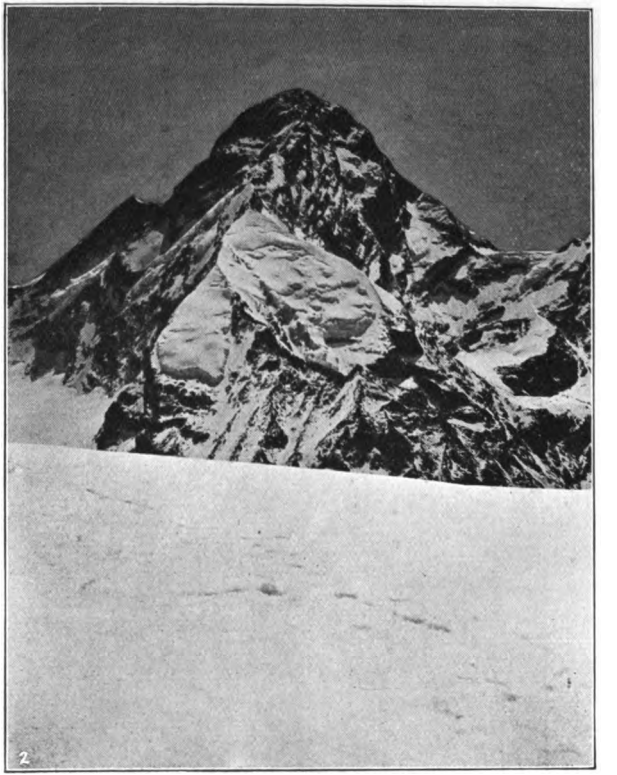
THE SCHLAGINTWEITS AND IBI GAMIN (KAMET).

ADOLPHE and Robert Schlagintweit approached British Garhwal from Tibet in August of 1855 and reached a height of over 22,000 feet on a mountain in a group which they described under the name of Ibi Gamin.

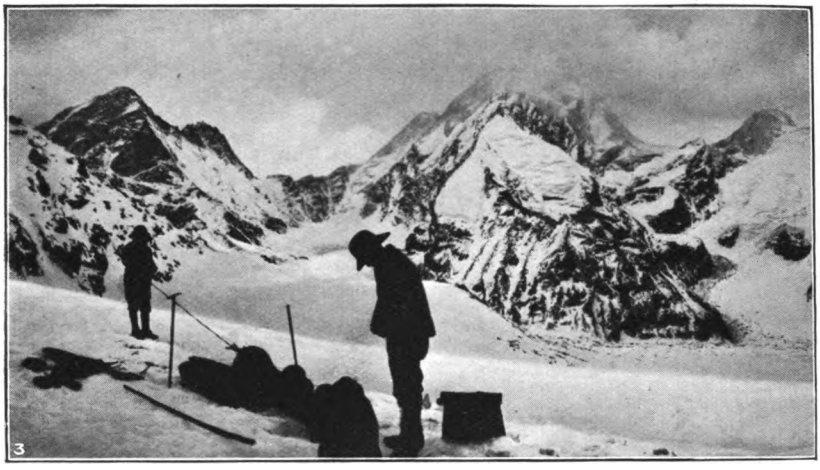
Three weeks afterwards Adolphe Schlagintweit made an accurate panorama drawing of the group from the Boko La,

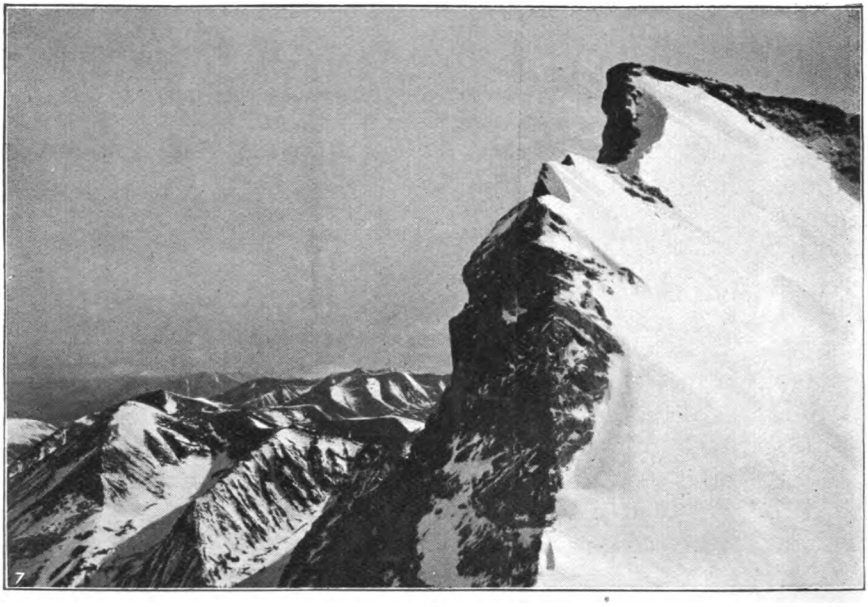
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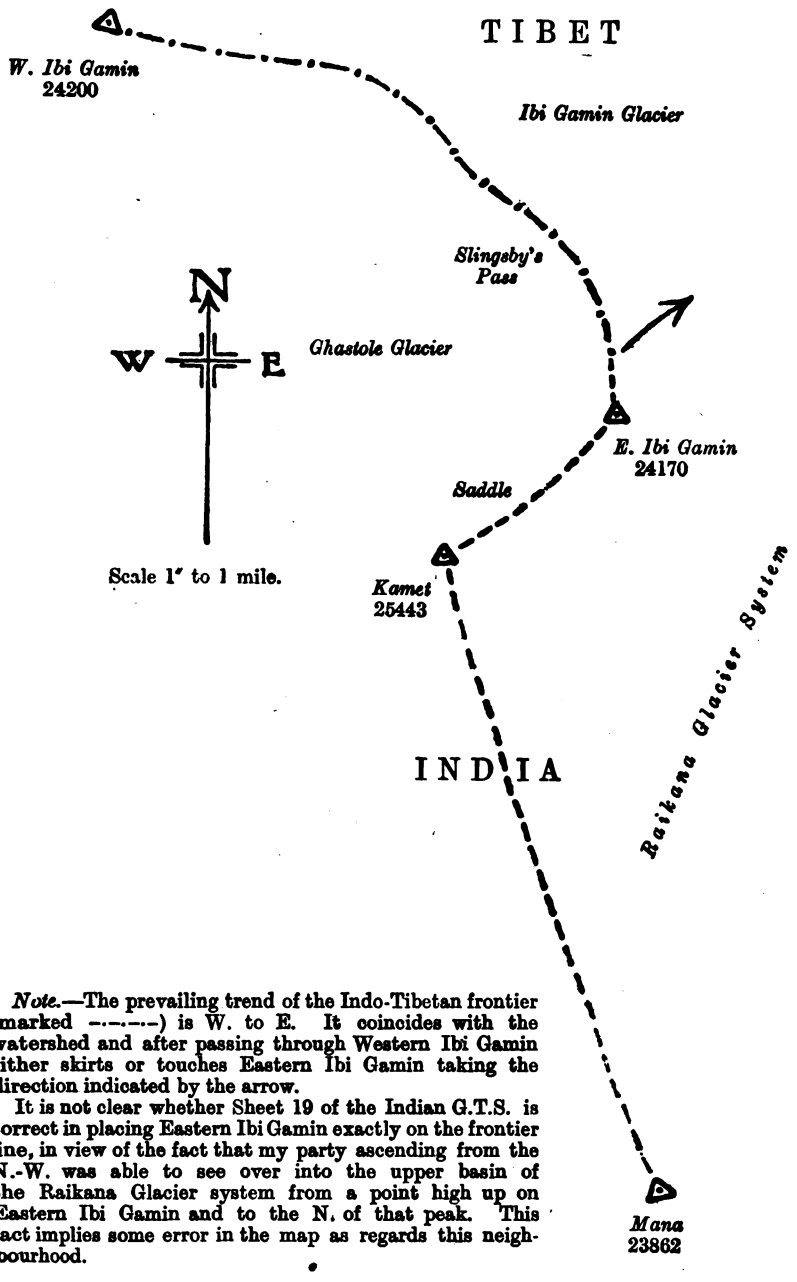
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SKETCH MAP BASED ON G.T.S.



Note.—The prevailing trend of the Indo-Tibetan frontier (marked –·–·–·–) is W. to E. It coincides with the watershed and after passing through Western Ibi Gamin either skirts or touches Eastern Ibi Gamin taking the direction indicated by the arrow.

It is not clear whether Sheet 19 of the Indian G.T.S. is correct in placing Eastern Ibi Gamin exactly on the frontier line, in view of the fact that my party ascending from the N.-W. was able to see over into the upper basin of the Raikana Glacier system from a point high up on Eastern Ibi Gamin and to the N. of that peak. This fact implies some error in the map as regards this neighbourhood.

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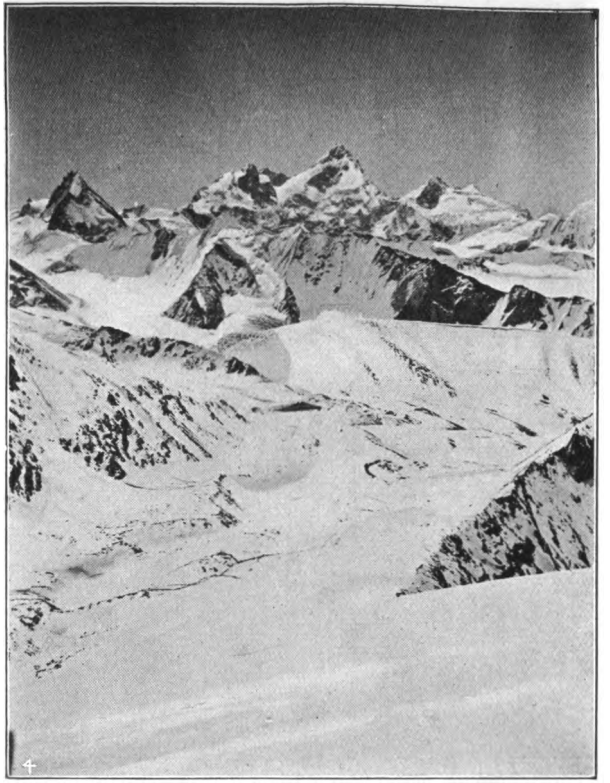
57 miles distant, in Tibet. There can be no doubt that the mountain named Central Ibi Gamin in the panorama, with an estimated height of 25,550 feet (the peak which the brothers believed they had attempted), is the Kamet of the Indian Survey, for Kamet is the only peak of over 25,000 feet with a similar situation in that neighbourhood. All three peaks in the drawing, 'Central,' 'Western,' and 'Eastern Ibi Gamin,' appear to be correctly placed, the central peak, now known as Kamet, being rightly shown as the highest. The 'Western Ibi Gamin' is Peak 48 of the Indian Survey, triangulated as 24,200 feet.

After three visits to this district I have come to the conclusion that the 'Ibi Gamin' on which the brothers made their record ascent is not Kamet ('Central Ibi Gamin'), as they believed, but the lower neighbouring peak 'Eastern Ibi Gamin,' afterwards triangulated by Strachey as 24,170 feet, and sometimes known as 'Strachey's Peak.'

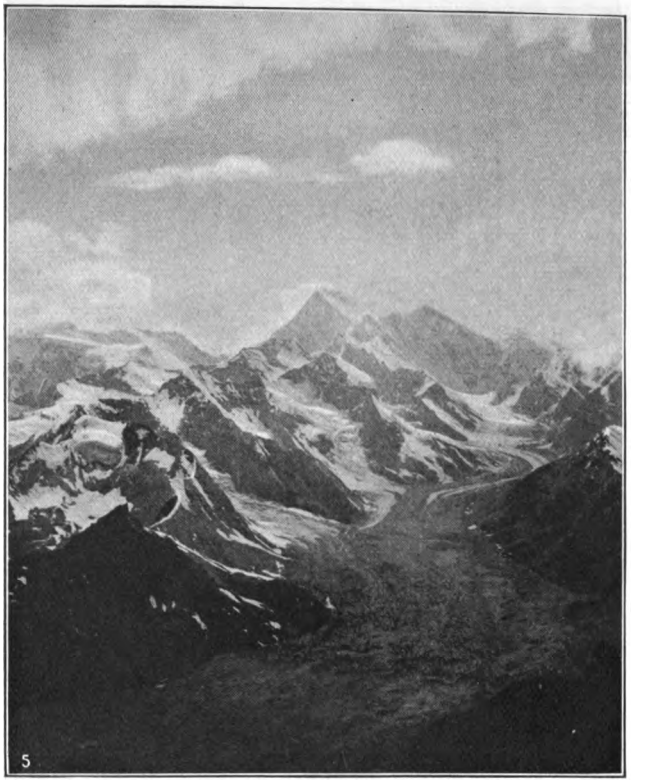
The Schlagintweits state that before making their ascent from a camp on the Ibi Gamin glacier in Tibet, they saw two peaks. One of these two must have been the 'Western Ibi Gamin' (Peak 48) afterwards sketched by Adolphe in his panorama. The other they chose for their attempt, thinking that it was the higher. They evidently believed it to be the 'Central Ibi Gamin' (Kamet) of the subsequent panorama, for they ascribed to it a height of 25,550 feet. But in my opinion they were deceived, and the mountain which they attacked was 'Eastern Ibi Gamin'—that is to say, Strachey's Peak—a summit much lower than Kamet, and 30 feet lower than Peak 48. In the case of climbers coming from Tibet the error is natural. Strachey's Peak might, by concealing Kamet, be easily mistaken for it. The higher mountain, Kamet, is a mile behind Strachey's Peak, and situated to the S.W. within the frontier, entirely in India. It would be practically impossible to reach Kamet from Tibet without first achieving a prodigious feat in passing over the top of Strachey's Peak, and it is clear that the Schlagintweits did not take this course. Similarly Mr. Pocock (of the G.T.S.), who came from Mana in 1875, must have set up his record plane table station (22,040 ft.) on Eastern Ibi Gamin and not on Kamet itself.

In spite of his accurate sketch from the Boko La, Adolphe Schlagintweit seems to have had no suspicion that it was the 'Eastern Ibi Gamin' of his drawing—that is to say, Strachey's Peak (24,170 feet)—that he had attacked with his brother three weeks previously. Nor did he seem to appreciate the signi-

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ficance of the fact that only two of the three Ibi Gamin which he depicts had been visible from the camp on the Ibi Gamin glacier (Peak 48 and Strachey's Peak as I believe).

In my own case, I had reconnoitred the group in 1910, but did not realise the separate identity of Strachey's mountain,[1] believing it to be a mere gend'arme till late in the summer of 1912, when I reached a height of about 23,000 feet on it, looked down on to the Raikana glacier system and found that the precipices of the southern face of our mountain cut us off from Kamet. Consequently, it was not till 1913 that my party made an attack on Kamet from the E., camping on a 23,000 feet[2] saddle between Kamet and Strachey's Peak thereby being the first party to set foot on Kamet itself; for the Schlagintweits, as I have explained, and the late Captain Slingsby, no less than my own parties previous to 1913, had fallen into the error of attacking the smaller Strachey's Peak (Schlagintweit's 'Eastern Ibi Gamin,' 24,170 feet according to triangulation).

The central and greatest of the Ibi Gamin is now commonly known as Kamet. For its two lesser neighbours, hitherto nameless in the map, I suggest that the names given by Adolphe Schlagintweit in his panorama should be kept—that is to say, that the 24,200 feet peak would be Western Ibi Gamin, and Strachey's Peak, the 24,170 feet mountain so gallantly attacked by Adolphe and his brother, would be known as Eastern Ibi Gamin.

NOTE.—Captain Longstaff, who has explored on both sides of the Kamet group, is in agreement with the substance of the above article. I have also consulted the following:—

'Great Trigonometrical Survey of India,' Kumaon and Garhwal, 1 in. to 1 mile, sheet 19.

'Great Trigonometrical Survey of India,' Synoptical, vol. xxxv., with companion volume of charts.

'Six Months in the Himalaya,' by A. L. Mumm (with maps).

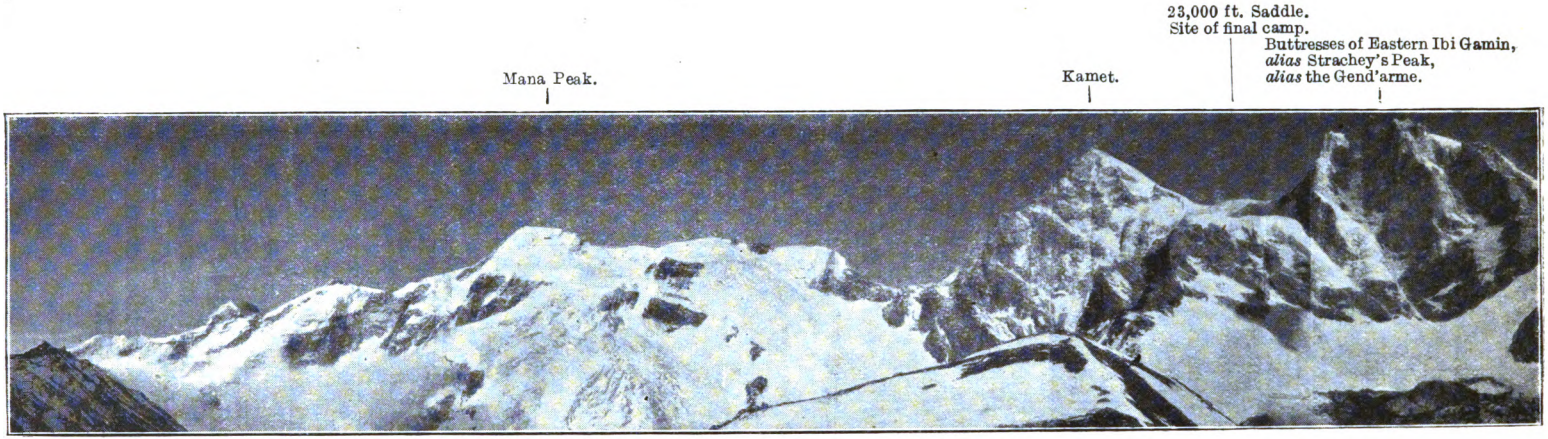
'Reisen in Indien und Hochasien,' by Hermann von Schlagintweit

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[1] The late Captain Slingsby also referred to it as the 'Gensd'arme' (see *Alpine Journal*, xxvii. 327). See also my 'Note on the Garwal Himalaya,' in which the point is discussed (*Alpine Journal*, xxvi. 435).

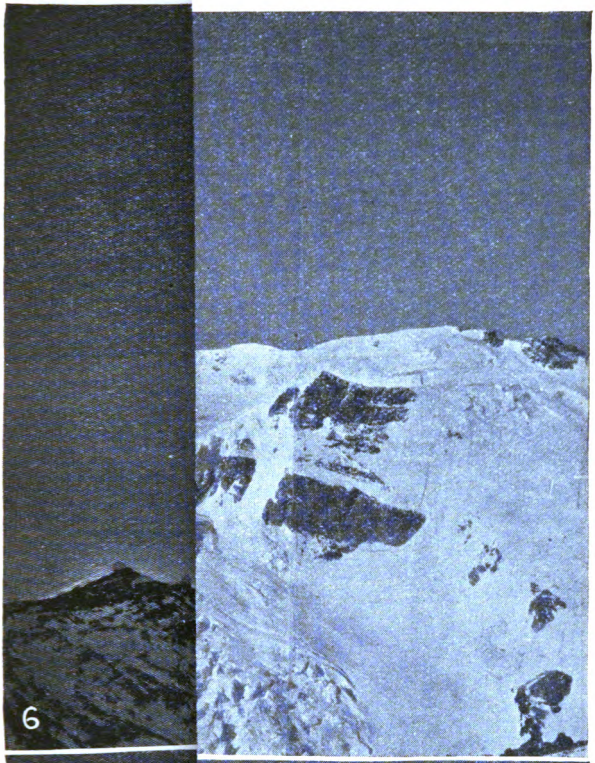
[2] This estimate was merely based on comparisons with the closely adjacent peaks of Kamet and 'Eastern Ibi Gamin' (Strachey's Peak). Both peaks have been triangulated, and I had repeatedly taken photographs from opposite sides of the saddle, showing the two mountains with the saddle between them.

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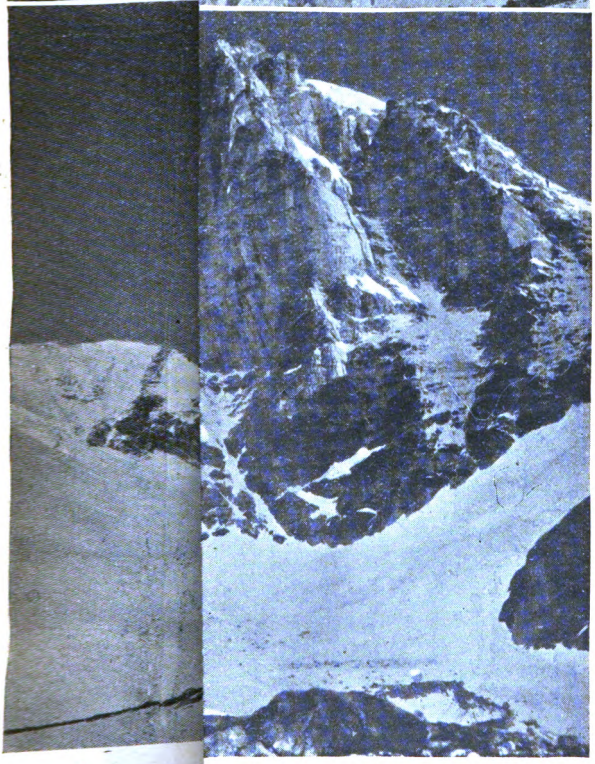


KAMET RANGE FROM E. FROM NEAR HEAD OF KAMET GLACIER.

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vol. ii., 1871, chapter v., part 3, pp. 347 *et seq.* For panorama of Kamet (Ibi Gamin) group, see Gebirgsprofile II.

I am indebted to Mr. Heawood, librarian of the Royal Geographical Society, and to Mr. Allen, assistant map curator, for kindly supplying me with much useful information.

C. F. MEADE.

TITLES OF THE VIEWS OF KAMET.[3]

(1) *From South.*—Kamet with Ghastole Glacier.

(2) *From South-West.*—Kamet showing Slingsby's Pass and the 'gendarme'-like appearance of Eastern Ibi Gamin (*i.e.* Strachey's Peak).

(3) *From South-West.*—Western Ibi Gamin (*i.e.* Peak 48) and Slingsby's Pass. Eastern Ibi Gamin (*i.e.* Strachey's Peak) and Kamet both in cloud.

(4) *From West.*—Western Ibi Gamin (*i.e.* Peak 48) and Eastern Ibi Gamin (*i.e.* Strachey's Peak).—Kamet and Mana Peak showing 23,000 ft. saddle between Eastern Ibi Gamin and Kamet where Mr. C. F. Meade's final camp was pitched.

(5) *From East.*—Kamet and Eastern Ibi Gamin (*i.e.* Strachey's Peak) with Strachey's Glacier (tributary to the Raikana Glacier).

(6) *From East.*—PANORAMA of Mana Peak, Kamet, and Eastern Ibi Gamin (*i.e.* Strachey's Peak) showing the above-mentioned 23,000 ft. saddle between Kamet and Eastern Ibi Gamin.

(7) Eastern Ibi Gamin (*i.e.* Strachey's Peak) from the 23,000 ft. saddle between Kamet and Eastern Ibi Gamin, with view over Tibet.

(8) Twin peaks of Western Ibi Gamin (*i.e.* Peak 48) from above Slingsby's Pass.

THE EARLY SWISS PIONEERS OF THE ALPS.

BY DR. H. DÜBI.

INTRODUCTION.

AT the request of the Editors, I have undertaken to write for the ALPINE JOURNAL the history of the mountaineering work done by Swiss tourists and naturalists, surveyors, and guides, in the Alps of Switzerland and the adjacent countries, during the first half of the nineteenth century. This subject has already been dealt with by Mr. William Longman in some

[3] The views are numbered.

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chapters of his 'Modern Mountaineering and the History of the Alpine Club,'[1] especially as regards Monte Rosa, the Jungfrau, the Finsteraarhorn, the Lauteraarhorn, and the Wetterhörner; and a valuable contribution to the subject was made by Mr. Freshfield in his article on 'Placidus a Spescha, and Early Mountaineering in the Bündner Oberland.'[2] The history of the first and second ascents of the Jungfrau by the Meyers has been discussed by the Rev. W. A. B. Coolidge[3]; that of the Finsteraarhorn by Captain J. P. Farrar and Mr. Coolidge,[4] and to the latter writer we are also indebted for a short sketch of the life of Gottlieb Studer[5]; while, recently, good work has been done by Captain Farrar in clearing up the early attempts to reach the summit of the Jungfrau from the Rottal and in determining the rôle played by the guides Peter Baumann, Peter Bischoff, Hans and Christian Lauener, and the naturalist Franz Joseph Hugi, in those expeditions.[6] The 'Führerbücher' of the brothers Zumtaugwald, and the 'Travellers' Book' of the Hôtel Monte Rosa in Zermatt, have furnished instructive details bearing upon the part taken by Matthäus and Johann Zumtaugwald in the first passages of the Weissthor to Mattmark and Macugnaga, and in the first ascent of the second summit of Monte Rosa.[7] The literature of my subject is therefore very vast, and the printed documents and MSS. at my disposal would enable me to fill a good-sized volume. But in order not to tax the patience of my readers, I shall content myself with an outline, filling in only such details as are strictly necessary to make my story intelligible and coherent. I shall, moreover, confine myself to the summits of the Swiss Alps, except a very few allusions to Mont Blanc. I am obliged, on account of Father Placidus[8] and Rudolf Meyer, senior, to begin with the last two decades of the eighteenth century, and I shall carry my record of Alpine travel and scientific exploration down to the year 1860—a date mid-way between those of the founding of the English and Swiss Alpine Clubs. My paper, therefore, covers a period of about eighty years.

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[1] *A.J.* viii., Appendix, p. 26–80.
[2] *A.J.* x. 289–313.
[3] *A.J.* xvii. 392–404.
[4] *A.J.* xi. 369; xxiii. 418–421; xxvii. 263–297.
[5] *A.J.* xv. 343–348.
[6] *A.J.* xxx. 277–285; xxxi. 210–211.
[7] *A.J.* xxxi. 218, 222, 224.
[8] The notice of *Placidus a Spescha* is held over for subsequent publication.—*Note by the Editor.*

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In this lapse of time mountaineering in Switzerland, as far as the Swiss pioneers are concerned, developed from a few isolated achievements, due to individual enterprise, into a sort of social current, requiring public organisation and official guidance. At the end of that period the climbing impulse had passed from a few old cities—such as Aarau, Soleure, Berne, Neuchâtel, Bâle, and Zurich, whence a few lovers of the Alps used to set out upon their well-prepared but rare expeditions—to a number of rapidly developing villages in the Alps—such as Zermatt, Grindelwald, Lauterbrunnen, Pontresina—where a somewhat indifferent and as yet inexperienced crowd of tourists, gathering annually in search of health or amusement, began, about 1860, to avail themselves, in so far as their means and the occasion permitted, of the experience and mountain-craft which the guides had acquired in the service of the older Swiss pioneers and other strangers. I shall endeavour to show how this development went on and to whom it was due.

The Meyer Family and their Assistants.

It is—at least in Switzerland—without precedent that the same family, through three generations, contributed so much to Alpine investigation and quitted the field of their exploits so abruptly as the Meyers of Aarau. Indeed, their brilliant career lasted not more than thirty years in all.

The senior of the family, Johann Rudolf Meyer, a citizen of Aarau, was born on February 25, 1739, and died on September 11, 1813. He is best known as the author of two remarkable works: 'The Relief of the Alps, from the Lake of Geneva to the Lake of Constance,' on the scale of 1 : 60,000, and the Atlas of Switzerland, in sixteen sheets, and a general map. The Relief was constructed between 1786 and 1797, at the cost of and under the personal inspection of Meyer in his house at Aarau, by the surveyors J. H. Weiss and J. E. Müller. A few smaller ones were made by Müller alone, especially one representing the Alps from Thoune to the Italian lakes, and from the source of the Rhone to the mouth of the Lötschenthal near Gampel. The Atlas was drawn, after a rough survey and an insufficient triangulation, by Weiss, in the years 1786–1797, and issued as the sheets were ready for publication: the first in 1796, and the last, a general map, in 1802. Further, a special map was published in 1796, bearing the title: 'Carte d'une partie très intéressante de la Suisse à l'usage des voyageurs. Elle renferme principalement une partie du Canton de Berne et du Valais et

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les glaciers qui dominent la frontière de l'Italie. Levée et dessinée trigonométriquement et géométriquement par J. H. Weiss au dépens de J. R. Meyer à Aarau.' That map, as well as Sheet 10 of the Atlas, served for the explorations of the Meyers in 1811 and 1812.

The preparation of the Relief and the Atlas necessitated a good deal of climbing. Thus JOHANN HEINRICH WEISS of Strassburg (1759–1826) ascended in 1787 the Titlis; in 1798 the Hangendgletscherhorn, and a point called by him 'Blaues Gletscherhorn,' on the Graugrat, between the Mattenalp and Guttannen, the Siedelhorn, and visited the Ober- and Unteraar Glaciers. He was accompanied by J. E. Müller to carry the theodolite. About 1796 Weiss crossed from the Grimsel by the Oberaar Glacier and Joch to the Fiescher Glacier, which he descended to Fiesch. 'Weiss and his companions were obliged to seek their way in and out of deep crevasses and to pass a night in the clefts of the eternal ice, where they burnt everything combustible with them to save them from death by the bitter cold.' About 1790, Weiss had the opportunity —so he tells us in a note to Sheet 14 of the Atlas—'to fix from the height of some great glacier summits adjacent to Piedmont the direction of some considerable ice valleys setting forth from those points.' But these indications are too vague to allow us to say how far Weiss got in the Pennine Alps.

JOACHIM EUGEN MÜLLER of Engelberg (1752–1832) was the companion of Herr J. R. Meyer on an ascent of the Titlis in 1787. He climbed with Weiss, and occasionally with Professor Tralles, in 1788. In 1789 he was surveying in the Bernese Oberland, where he ascended the Schilthorn and the Faulhorn, and in 1790 at Saanen, in the Pays d'en haut, and in the Lower Valais. In 1791 he, as he tells us, 'pervaded the whole Bernese and Valaisan high mountain-range through all the valleys from Mont Blanc to the Furka.' In 1792–1794 he was travelling, for the purpose of the Relief and the Atlas, in the cantons Uri (where he ascended the Uri-Rothstock), Schwyz, Unterwalden, Zug, Glarus, the Grisons, Appenzell, Zürich, and even in Vorarlberg. In 1795, with three men from Engelberg, he ascended the Titlis, sketched the panorama from the Scesaplana to the Niesen, and found by measurement the icy calotte to be 172 French feet thick. After a long interruption, caused by the French Revolution and the Napoleonic Wars, Müller finished his Alpine work in 1811–1813 by constructing cadastral signals, at the instigation of Weiss, on the Titlis, the Six Madun, and other summits.

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Johann Rudolf Meyer himself was a capable mountaineer. About 1765 he undertook 'a voyage in the then hardly known districts of the Gotthard and the Bernese Oberland.' In 1787 he ascended the Titlis with Weiss and Müller, as we have seen. We know of no other climbs of his; for a passage of the Tschingelpass, in 1790, sometimes credited to him, was really made by his elder son.

Johann Rudolf Meyer II. was born on April 3, 1768, and died in 1825. He had some reputation as a naturalist, and published, from 1806 onwards, a series of articles on natural science, in a magazine issued by himself at Aarau; while his principal occupation was the management of a silk-ribbon mill, founded and brought to great prosperity by his father. There is some mystery about a route made by him in 1790. A certain L., who crossed the Tschingelpass in 1808 with two of Meyer's guides,[9] writing of Meyer's journey, says: 'As his guides were unacquainted with the glacier, they clambered, not without danger to their lives, up the much more precipitous and from below nearly inaccessible N. side of the glacier [and descended] into the Valaisan Gastern Valley.' The last three words are nonsense; and as the same author later on says that Meyer had successfully passed between some séracs on the N. side of the glacier, and as the map in Meyer's 1813 pamphlet shows tracks on the Gastern or Kander Glacier, one on its right, the other on its left bank, and another to the top only of the Petersgrat, we may reasonably presume that J. R. Meyer, in 1790, followed to some extent the four miners who, on July 12, 1783—crossed from Trachsellauinen to the Lötschenthal,[10] while he mounted to the Petersgrat, followed thence the frontier ridge between the cantons of Berne and Valais, and descended somewhere near the Sackhorn (it is named in the 1813 pamphlet as well as on Sheet 10 of the Atlas) to join the Tschingelpass route at Selden in the Gastern Valley. As this is an obviously roundabout route from Lauterbrunnen to Kandersteg, and as L.'s statement is very indefinite, I suggest that young Meyer may have been simply exploring for his father's Relief and Atlas. It would be interesting to know the names of Meyer's guides in 1790. One is termed a Lauterbrunnen man, another a chamois hunter. But, as Capt. Farrar observes,[11] they cannot have been Peter Bischoff

[9] *A.J.* xxxi. 211.
[10] *Climber's Guide to the Bernese Oberland*, vol. i. pt. 1, p. 51.
[11] *A.J.* vol. xxx. 283.

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and JOHANN LAUENER, as the former was born in 1777 and the latter in 1788 only. At all events, the passage of the Tschingelpass in 1790 was a daring enterprise, and had been anticipated only once—namely, by the Bernese surveyor Samuel Bodmer, about 1710, whose journey was never published.

It was not till twenty years later that Johann Rudolf Meyer II., together with his younger brother HIERONYMUS (born September 17, 1769), set out again to explore the mountain region between the Bernese Oberland and the Upper Valais. It will save trouble if we begin our description of their exploration by working out from their own words,[12] and the maps at their disposal, what had been previously done. We learn that some enterprising men had crossed from the Urbachthal to the Lauteraar Glacier and the Grimsel; others had ascended the Lauteraar Glacier for an hour and a half. The Oberaar Glacier and the Studerfirn were known and mapped. So also the Fiescher Glacier, from the foot of the Finsteraarhorn to its end in the Fieschertal; the same was the case with the Märjelenalp and the Aletsch Lake. The Lötschenthal was known right to the Lötschenlücke; and there was a tradition that once a man, guided by a will-o'-the-wisp in moonlight, had passed over the Aletsch Glacier to the Lötschenthal. The Aletsch Glacier had been ascended from the gorge of the Massa or 'Blindentobel' inwards for about two hours. The Aletsch huts, the Great Aletsch Glacier, and the Ober Aletsch Glacier, are marked on Sheet 10 of the Weiss Atlas. But nobody in 1811 was aware that it was possible to cross from the Grimsel to Grindelwald by the Lauteraarjoch or the Strahlegg, and from the Fiescher Glacier by the Grünhornlücke to the Aletsch Glacier. Thus to approach their goal, the Jungfrau, the brothers Meyer had two ways open: one from Naters by the Aletsch Glacier, the other from Gampel by the Lötschenthal and the Lötschenlücke. For they doubted the possibility of reopening the route by which in 1712 some Bernese peasants, to escape persecution by the Catholics in Valais, were said to have crossed from the Fieschertal to Grindelwald.

They started with a good outfit, warm clothes, a great black linen sheet that served as a tent and was destined to be used as a flag on the top of the Jungfrau, ropes, alpenstocks, a ladder, dark veils, but without scientific instruments, esteeming such

[12] *Reise auf den Jungfrau-Gletscher und Ersteigung seines Gipfels, von Joh. Rudolph Meyer und Hieronymus Meyer aus Aarau im Augustmonat* 1811 *unternommen*, pp. 6–9.

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things a hindrance for venturesome climbers. The brothers, with three servants, left Aarau on July 29, 1811, took their way by the Entlibuch, the Brünig, Meiringen, and Guttannen, where they picked up as porter one KASPER HUBER, a servant of the innkeeper. They reached the Grimsel the next day, July 30 (a remarkable speed for those days of no carriage-roads), and crossed it to Ulrichen in the Valais. At Fiesch they changed their original intention, dreading the length of the approach to the Jungfrau by the Aletsch Glacier. So there remained the way by the Lötschenthal, at one of the alps of which they were told they would find one of the boldest chamois hunters, who could guide them by his experience. They accordingly left the Rhone valley somewhere between Fiesch and Naters (I think at Laax), 'kept high up on the mountain-side, with different guides, crossed some mountain ridges, and reached the uppermost alp of the Lötschenthal.' on the evening of July 31. This must mean that the party covered in one day the journey from Laax by the Bettmer- and Riederalps, the Riederfurka, across the Aletsch Glacier to the huts of Oberaletsch and by the Ober Aletsch Glacier and the *Beichpass* to Fafleralp or Gletscherstafel. I lay stress on this fact because it proves that the brothers Meyer were trained men and enduring and fast walkers. We learn, indeed, from others that J. R. Meyer II., and so also his son Joh. Rudolf III., were men of great strength and renowned athletes. At the 'Lötschenalp' they found two chamois hunters, ready to go, provided both went, for 25 batzen (about 3½ francs) a day. Their names are ALOYS VOLKER and HANS JOSEPH BORTES. They were from Fiesch or the neighbourhood, and herded cattle only occasionally in the Lötschenthal. In 1812 we find them herding cattle at the Märjelenalp, when not engaged as guides by the Meyer family. The Meyers' party—consisting of eight men—started from the uppermost chalet in the Lötschenthal at 5 A.M. on August 1, 1811. In four hours they gained the Lötschenlücke, whence they sent back their three servants from Aarau, who proved too timid for glacier work. The other five descended the Aletschfirn and spent the afternoon reconnoitring the position of and access to the Jungfrau. They bivouacked on some rocks 'on the N. side of the glacier, where the Lötschen Glacier [Aletschfirn] unites with the Aletsch Glacier.' The spot is indicated on the map in the 1813 pamphlet, and is marked 2967 on the Siegfried map. Near the bivouac place, they found the skeletons of two chamois. The next day, August 2, at dawn, they attempted the Jungfrau from the S., struggling up a much crevassed

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'glacier valley descending from the Jungfrau and the Mönch.' where the ladder was more than once required. The map in the 1813 pamphlet makes this to be the Kranzbergfirn of the modern maps. But at 10 A.M., when the top of the Jungfrau seemed not very distant and only 600 feet higher, the 'Föhn' forced them to retire. At 2 P.M. they were back at their night's quarters and started out again to reconnoitre. This time they ascended 'another glacier valley, more to the E., likewise descending from the Jungfrau'—evidently the modern Ewigschneefeld. The narrative proceeds: 'We now learned the connexion between the Aletsch and the Fiescher Glaciers as well as the continuous connexion (Zusammenhang) between the same and the Lauter-, Finster- and Ober-Aargletscher, which all unite behind the Jungfrau in valleys hours long.' They discovered also a better access to the Jungfrau from the E., and moved their bivouac to 'a point of considerable height, half an hour S. of the Mönch, at the foot of the Jungfrau Glacier,' to the E. of and higher than the first night's quarters. The spot is not indicated on their map, but is clearly at the foot of the Trugberg, 2830 m. This I conclude from a geognostical observation of J. R. Meyer,[13] corroborated by Edm. v. Fellenberg.[14] It is not necessary to presume that the Meyers confounded the Mönch with the Trugberg, which does not figure on their map, measured on which P. 2830 is about half to three-quarter hour S. of the Mönch, whose position is rightly indicated on Sheet 30 of the Atlas, which served as base for the 1813 map and for the 1811 text.

Early on the morning of August 3, 1811, the brothers Meyer, with Volker and Bortes, started for the ascent of the Jungfrau, sending Huber back over the Lötschenlücke to bring more fuel and food from the chalets in the Lötschenthal to their first bivouac. The uncertainty of their exact route is mainly the fault of the 1813 map, on which it is marked *behind* [W. of], and finally along the crest of a continuous arête, descending from the top of the Jungfrau to the spot marked 'Vorjähriges Nachtlager,' or bivouac of August 1 and 3, 1811, and dividing what we now call the Kranzbergfirn from the Jungfraufirn. This is doubtless the direction of their first attempt on August 2, but cannot be reconciled with the events of August 3, when the Meyers, starting from their bivouac at the foot of the Trugberg as 'the first

[13] *Reise auf den Jungfraugletscher*, etc., p. 36.
[14] *Jahrbuch S.A.C.* xiv. 270.

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rays of the sun just reddened the rocks of the Jungfrau, rising close before us. We now proceeded up the masses of ice and snow which descend from the Jungfrau. We hoped, as the mountain was now quite close, to gain the summit by following this same snow-slope. But what we took for a continuous snow-field was an optical delusion, for, suddenly, in front of us, there appeared a *Tiefe* [descent] of 40 to 50 feet, to which one could only descend with difficulty; left and right slopes fell away steeply and deep. The way down to the foot of the summit of the Jungfrau lay along a sharp glacier-ridge or saddle. We attached, where this ridge commenced, a rope to an alpen-stock driven deep into the snow, and sat ourselves astraddle on the sharp snow-saddle; thus we slid, one by one, safely down and came to the foot of the summit, to which we approached quite close, passing in and out between rocky points projecting from the ice' (Pamphlet 1811, pp. 19–20). I think I am right in supposing that, just before the short descent, the point gained was about 3980 m., between the Rottalhorn and the Rottal-sattel, and at the W. or upper end of a spur ending at P. 3388 in the Jungfraufirn. This spur is distinctly marked on Gottlieb Studer's panoramas from the Gamchilücke and the Eggishorn,[15] and its highest point (the Rottalhorn?) is called by Studer, Kranzberg. Even in our day the guides persist in applying to the same spur the name Kranzbergeck.[16] They had taken to the Rottalsattel about four hours, but the last 309 metres of the arête leading to the summit took them six hours. The leader from time to time fixed a rope in order to help the others. Note they had neither axes nor crampons. So progress was necessarily slow. Shortly before the top, a crevasse—a yard broad—that crossed the very narrow arête, gave them some trouble. They gained the top at 2 P.M., and stayed half an hour, enjoying the view and the topographical instruction it gave them. They felt no ill effects from fatigue, cold, or the rarefaction of the air. A sheet of black linen, nailed to one of the side-rails of their ladder, driven seven feet deep into the snow of the summit, served as a flag. They redescended to the Rottalsattel with great care, often backwards. When they arrived at the upper end of the Kranzbergeck, one of the hunters

[15] See *Atlas zu G. Studer's topographischen Mitteilungen aus dem Alpengebirge,'* Sheets II. and V., 1. The panorama from the Gamchilücke was drawn August 30, 1840; that from the Eggishorn, August 15, 1842.

[16] See *Climbers' Guide to the Bernese Oberland*, vol. i., pt. 1, p. 90.

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collapsed from the strain. As he was nearly blind, his eyes were bandaged, and he had to be led on the rope for the rest of the descent. Nevertheless, they reached before dark their first night's quarters at the foot of the Kranzberg, where a good fire and fresh provisions, brought by Huber, ensured them refreshment and a comfortable night. On the early morning of August 4, they returned by the Lötschenlücke to the Lötschenalp. Here they took leave of the two hunters, who assured them that they were ready to accompany them next year wherever they wished to go. The brothers and Huber 'went high up, along the snows, over the mountains, down to Fiesch [presumably over the Beich Pass, 'Bernese Oberland, edition 1910, vol. i. pt. 2, p. 144], for on August 5 they recrossed the Grimsel, where they wrote down the first record of their expedition in the 'Fremdenbuch' of the (then) tenant of the hospital, Melchior von Bergen.[17]

The news of the first ascent of the Jungfrau spread rapidly and excited great interest in Switzerland, Germany, and even France, but, after a time, was received with incredulity. This provoked an excited and occasionally heated discussion, filling many pages in a Bernese magazine. It would be interesting, from a historical and psychological point of view, to give full details of these altercations, but they would lead us much too far. Still, as something has been already said about the matter in this JOURNAL,[18] I may perhaps be allowed to add a few dates and facts. The first notice of the climb appeared at Berne, Saturday, August 10, 1811, in No. 126 of the *Gemeinnützige schweizerische Nachrichten.* It bears the date: Berne, July 9 [*sic*], and runs as follows (I translate *verbatim*): 'In the first days of this month, August, two rich Swiss private individuals, whom, for the moment, we do not, out of discretion, name, accomplished what till now seemed impossible—namely, the ascent of one of our highest ice mountains, the *Jungfrau.* After they had passed three days and four nights continuously upon fields of ice and snow, and after some attempts by the Aletschglacier had failed, these Swiss nature-lovers succeeded at last, on August 3, in gaining the summit of the Jungfrau, planting there a black flag. A more explicit description of that interesting enterprise will no doubt appear soon.' There is no signature; but we learn

[17] It was published in 1817 by Professor J. Rud. Wyss in his *Reise in das Berner Oberland,* vol. ii. p. 753, *note.*

[18] Vol. xxix. 333–336.

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from a later remark in the same journal that this notice was sent to the editor, Albert Höpfner, by Rudolf Meyer himself, with the request to suppress their names till they themselves had an opportunity to publish a record of their exploits. The full record, signed by the two brothers, was published practically in identical terms—namely, in Nos. 135 to 139, August 27 to September 3, 1811, of the said *Gemeinnützige schweizerische Nachrichten*, and in Nos. 68 and 69, Saturday and Wednesday, August 24 and 28, 1811, of *Zschekke's Miscellen für die neueste Weltkunde*. A reprint from the *Miscellen* was issued shortly afterwards at Aarau, by the printer H. R. Sauerländer, who in the 1813 pamphlet draws attention to the 1811 pamphlet, and adds that copies were to be had for '5 Gr[oschen] oder 16 Kr[euzer].' The original short notice was published in French in the *Gazette de Lausanne* of Août 20, 1811, and the full record in the issue of October 4, 1811, both taken from the Bernese journal. The translation contains many mistakes, and omits all topographical details. Hardly was the publication (at the end of August 1811) complete before the critics got to work. The principal doubters were Höpfner, Hans Conrad Escher of Zurich, and Professor Trechsel of Berne. Höpfner was himself an experienced mountaineer; he had been on the Mer de Glace at Chamonix, and on the Aar-glaciers, and he took great interest in mountain exploration.[19] On September 4, 1811, he published an editorial note in No. 140 of his above magazine, stating that, as an '*ehemaliger Bergläufer und Bergbesteiger*,' he found great pleasure in publishing the short notice and the full description of the ascent of the Jungfrau. But he, like many others who had sent in queries and remarks, was surprised that the Meyers did not give the names of their guides, or of the alp in the Lötschenthal where they took them from. Nobody had been able to identify the man from Guttannen who had been with them on the Jungfrau; nobody had seen the flag on the top of the Jungfrau. Höpfner criticised also their physiological experiments compared with those of De Saussure on the Mont Blanc, and he adds the following queer notice: 'It is well known that this indefatigable naturalist caught the germ of his subsequent fatal illness on that ascent.' Even after a verbal testimony of the two Valaisan hunters had been published by the Meyers, Höpfner

[19] See my book, *Paccard* v. *Balmat*, pp. 63, 66–67, and 234, *note* 72, Höpfner published, in 1787, a German version of Bourrit's ill-advised letter of September 20, 1786.

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persisted in saying (No. 148 of his magazine, September 18) that more investigation was needed.

Johann Conrad Escher, immortalised by the canalisation of the Linth River, also expressed doubts as to the geognostical facts in Meyer's report. He was the great authority on such matters in Switzerland, and had travelled much in East Switzerland and in the Valais, of the frontier ridge between which and Piedmont he had, in 1797, prepared a map. He had, however, never been nearer to the Jungfrau than the Sulegg,[20] and his criticism of Meyer's scientific observations is somewhat theoretical. He seems to argue from the title, 'Reise auf den Jungfraugletscher,' that perhaps the Meyers 'reached only the top of one of the highest secondary glaciers'; and he asserted, borne out by Höpfner and others, that the summit of the Jungfrau, as well as those of the Mönch, the Eiger, and the Wetterhorn, consisted of limestone. Since Rudolf Meyer, who is responsible for the geognostical chapter in the 1811 pamphlet, noted that the last 600 feet of his mountain were composed of 'strata of mica, hornblende, and clay, standing upright,' his critics were inclined to think that he had not reached the very top. But these arguments are not sound. To call an ice-covered ridge between two valleys a 'glätscher' was the fashion of the time, ever since Aegidius Tschudi and Josias Simler, and we see this same denomination used by 'L.,' already mentioned, as late as 1808. But for us, all that the Meyers say about the conditions of the rocks above the Rottalsattel and the final snow-crest is clear proof that they were on the very top (4296 m.) of the Jungfrau. Rudolf Meyer must also be credited with the discovery of some cuneiform limestone bands that penetrate into the crystalline strata of the range of the Jungfrau.

Professor Friedrich Trechsel (1776–1849), who was, in 1811 with J. J. Frey and others, occupied in the triangulation of the Canton of Berne, laid stress on the fact that, when on the summits of the Hohgant and the Niesen, in August 1811, he, even with a six-foot Dollond telescope, saw no flag on the Jungfrau. But he was candid enough to add that on August 4–6 a storm raged on the high mountains, which might have blown it down or buried it in snow.

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[20] See my book, *Paccard* v. *Balmat*, pp. 155–6 and 238, *note* 152. Escher was, in 1808, a great admirer of the 'despised and rejected Jaques Balmat,' whom he rates far higher than the wealthy De Saussure.

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The brothers Meyer did their best to clear up the matter. They sent men with telescopes to the Oberland to search for the flag; they had the two hunters come to Aarau to be interviewed; they published their names, as well as that of the 'man from Guttannen'; they announced their intention to make a second and more scientific expedition in the same region next summer, and invited their critics to accompany them there.[21] In his reply to the 'somewhat bitter and elusive answer of the brothers Meyer,' and to some remarks in other journals like *Die allgemeine Zeitung*, *Das Morgenblatt*, *Der Erzähler*, etc., Höpfner [22] confirms two facts: (1) That he and Escher never doubted the veracity of the Meyers as gentlemen, nor their ability to climb high mountains; (2) that if the two hunters really gained the said highest summits—*i.e. das Jungfrau-Eisgebirge oder einen seiner Gipfel*—Rudolf Meyer, jun., as a well-known mountaineer, was the man to follow them. But Höpfner and Escher persisted in contending that the description of the journey was deficient in the geognostical as well as in the descriptive and picturesque respects.

Thus ended the controversy with a sort of compromise that gave satisfaction to neither party. But in the course of the discussion Alpine literature was enriched by two records not before published: one of the traverse of the *Gaulipass*, by Herren Rudolf Stettler of Zofingen and von Graffenried of Berne, on August 10, 1795 [23]; the other of the same passage by Herr Arnold Brügger of Meiringen, on August 5, 1802.[24] As a contribution to Alpine humour, we translate (from the German, as we have not seen the French original text) a notice that appeared in the *Moniteur de Paris*, Septembre 8, 1811. The extract given by Höpfner runs as follows: 'Rudolf Meyer recognised the summit of the Jungfrau. They ascended it as best they could, and bivouacked there for the night. Fortune would have it that two lean chamois had strayed thither. They were killed, and a great fire lighted to cook them. The night was not so cold as was expected,' etc.

We can well understand why the Meyers took great care to

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[21] *Gemeinnützige schweizerische Nachrichten*, No. 160, October 9, 1811.

[22] *Ibid.* No. 173, November 1, 1811.

[23] *Ibid.*, No. 152, September 25, 1811; reprinted in *Jahrbuch S.A.C.* xxxi. 355–61.

[24] *Ibid.* No. 148, September 18, 1811. See also *Reise in das Berner Oberland*, ii. 719, *note*.

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thoroughly prepare their next expedition and to secure the best results. Three objects were aimed at: first, to dissipate all doubts as to the ascent of the Jungfrau; next, to climb the Finsteraarhorn; lastly, to make glacier measurements and scientific observations. In all these respects they were fortunate; but, nevertheless, they were destined to meet with disbelief as to their principal exploit—if not immediately, yet later, and in a disagreeable manner. Our knowledge of their deeds in this year is based, save for some short notices in contemporary journals, on two accounts given by the Meyers themselves—namely, the pamphlet 'Reise auf die Eisgebirge des Kantons Bern und Ersteigung ihrer höchsten Gipfel im Sommer 1812. Mit einer Karte der bereiseten Gletscher, Aarau 1813,' edited by H. Zschokke, and an article in the *Alpenrosen auf das Jahr 1852*, entitled: 'Erinnerungen an Prof. Dr. Rudolf Meyer.' The latter is the original account, written by Rudolf Meyer and Gottlieb Meyer, the young sons of the said Joh. Rudolf Meyer (II.) and grandsons of the patriarch of the family, Joh. Rudolf (still living in 1812), the promoter of the Atlas and Relief of Switzerland, in 1812, but only published in 1852, and corrects some statements in the 1813 pamphlet, made by Zschokke; but we must deplore that Dr. Rudolf Meyer, after the altercation with Professor Hugi, in 1831, did not, before his death two years later, clear up the doubtful points. We shall now describe the events as we understand them to have occurred.

A considerable party, consisting of Joh. Rudolf II. and Hieronymus Meyer, the conquerors of the Jungfrau in 1811, Dr. Thilo, teacher at the Gymnasium of Aarau, Rudolf and Gottlieb Meyer (sons of J. R. II.), left Aarau, on July 24, 1812. Their equipment included a complete camping-outfit, ropes, alpenstocks, crampons, green veils, and spectacles, as well as physical and mathematical instruments. Barometers and thermometers were daily observed at Aarau and on the lakes of Lucerne and Thoune, to control the observations to be made on the high mountains.

Of this party the principal actor merits a short biographical notice. Johann Rudolf Meyer III., generally known as Dr. Rudolf Meyer, born March 6, 1791, was educated at Aarau, and, with his younger brother Gottlieb, attended, about 1801, Pestalozzi's celebrated school, then at Burgdorf in the Canton of Berne. From 1806 till 1809 he was a pupil of the Gymnasium in his native town. In 1809 he went to the University of Tübingen, where he remained four years,

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studying medicine. After taking his degree as M.D. at Tübingen, he travelled through Bohemia, Saxony, the north of Germany, and the Danish Islands; completed his scientific education at Freiburg, Berlin, and Göttingen, and returned to Aarau in 1815. He married in 1817; lived four years at Constance, where he wrote a compendium of natural philosophy, called 'Geister der Natur.' In 1821 he was elected professor of natural science at the Gymnasium of Aarau. These functions, and other civil duties, tied him to his native town and permitted only one considerable absence —a journey to London and Paris, in 1824. In his youth, he was an active gymnast and a walker of great endurance. In later years his health weakened; he fell ill in 1831, recovered for a short time, but died from gout on November 6, 1833.

About his brother GOTTLIEB we know little. He was born April 28, 1793. He seems to have followed his father in the management of the silk manufactory, and died on September 3, 1829, leaving a son and a daughter.

We return now to the events of 1812. The five travellers were accompanied by several porters and four guides: Aloys Volker, Joseph Bortes, Caspar Huber, and Arnold Abbühl. The latter figures in the Meyers' company here for the first time.

I find it necessary to clear up, once and for all, various misapprehensions as to his origin. In the 1813 pamphlet, and even in the original account, he is called 'Arnold von Melchthal,' and described as 'Knecht' of the landlord at the Grimsel hospice. Although this misleading designation was corrected as early as 1817, by J. R. Wyss,[25] most authors, and even I in the second edition of Studer's 'Ueber Eis und Schnee,'[26] were induced to think he came from the valley of the Melchaa, in the Canton of Unterwalden. Now, looking carefully at Rudolf Meyer's text, one ought to have seen that the romantic young man called his brave guide 'von Melchthal' because his mind was full of Schiller's patriotic Swiss play, 'Wilhelm Tell,' published in 1803. In truth, Arnold's home was at Im Boden, near Guttannen, where he was visited by Pfarrer J. Schweizer, on September 13, 1821.[27] I am indebted to the good offices of Herr K. Nägeli of Guttannen for the following details about the Abbühl family.

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[25] *Reise in das Berner Oberland*, ii. 753, *note*.
[26] Vol. i. 96.
[27] *Alpenrosen auf das Jahr 1827*, p. 319.

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The name figures in the registers of Guttannen as early as 1715. A Christian Abbühl died there in 1731; a Melchior Abbühl, the grandfather of our man, was killed by the Spreitlaui Avalanche, on March 14, 1748. Arnold is a frequent Christian name in that family. The father of Arnold married Anna Ott, and Arnold was baptised on September 22, 1782; he married, on March 26, 1816, a cousin, Katharina, daughter of Christian Huber and Margaretha Abbühl, widow of Ulrich von Bergen and sister of his comrade of 1812, Kaspar Huber. They had two sons, Arnold, baptised February 6, 1820, and Kaspar, born April 28, 1823. This Arnold emigrated, between 1850 and 1854, with his family to America. Kaspar married, on May 11, 1854, Katharina von Weissenfluh, and died on October 13, 1883. A son, Arnold, born December 12, 1856, perished in a 'Schneeschild,' on January 21, 1896; another, Melchior, went to America; a third, Kaspar, born July 12, 1863, is a peasant still living below the 'Hochfluh,' near Guttannen.

Arnold, of Finsteraarhorn fame, met prematurely with a death not uncommon at Guttannen. On March 3, 1830, he, with seven others, was buried by an avalanche near the Grimsel hospice, and his corpse was found on June 26, in the Grimsel lake. On the death-roll he is described as former 'chorrichter' or member of the local bench. So it would seem that he was well esteemed in his native village.

No doubt Kaspar Huber was engaged by the Meyers at Guttannen, and Abbühl at the Grimsel, the same as in 1811. Thither had also come from the Fiescherthal the two Valaisan hunters, Volker and Bortes. The Meyers themselves arrived at the Grimsel at noon, July 25. As in 1811, they had taken their way by Lucerne, the Brünig, and Oberhasli, travelling fast. Towards evening the united party left the hospice and went by the Kessithurm route to the Oberaaralp, where they passed the night in a Valaisan goatherd's hut. On the early morning of July 26, they continued their journey, crossed the Oberaarjoch to the Studerfirn, and ascended the Rothhornsattel or Gemslücke, where they found their father Joh. Rudolf Meyer, who, on the previous day, with a young shepherd, had pushed as far as the foot of the Finsteraarhorn, but had been overtaken by the dark, and obliged to pass a very uncomfortable night without fire and covering. The party built on the Gemslücke a rough stone hut, covered with their alpenstocks and a tent cloth. Therein they passed two nights and one day, as a raging storm with snow and bitter cold

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prevented all further climbing. On the morning of July 28 they left their instruments in the snow-filled hut and went back the same way to the Grimsel. Here they remained till August 14. Some of the party returned to Aarau. The others, on the rare days when the weather cleared up, made easy walks in the neighbourhood, ascended the Zinkenstock, the 'Fischschwanz' (?), the Siedelhorn, and visited the Unter- and Finsteraar Glaciers.

On the morning of August 15 Joh. Rudolf Meyer, the younger or III., with Volker, Bortes, Abbühl, and Huber, started for the ascent of the Finsteraarhorn.

The text of the pamphlet of 1813 and of the original description written by the Meyers in 1812, but only published in 1852, together with literal translations, are given in Captain Farrar's article, published in the ALPINE JOURNAL, xxvii. 269–78, to which I must refer the reader.

I am well aware that, by accepting Farrar's conclusion as to the point where Meyer stayed behind, which Farrar calls 'Meyer's Peak,' I give up a strong point on which Dr. Coolidge, Professor Lüders and I rely to oppose Farrar's argument based on the 'clock evidence.' It seems indeed more reasonable that a stiff walk of about eight hours brought the whole party (five men) from the Gemslücke to the 'Vorgipfel' (height about 4165 m., horizontal distance from the summit 280 m.), and that an arduous climb of three hours brought the three guides to the only 110 mètres higher summit of the Finsteraarhorn, rather than to allow eight hours for the ascent from the Gemslücke to the so-called Meyer's Peak (height about 3903 m.) and to squeeze the remaining 850 m. of distance and 372 m. of elevation into three hours' climbing. But as this consideration of time is, in my opinion, not a decisive point, and as I am prepared to produce good evidence that Meyer's three guides really reached P. 4263, *i.e.* the top of the Finsteraarhorn, we admit, with Captain Farrar, that they started from Meyer's Peak and *not* from the minor summit. In my opinion, every statement in the account, if not every word, deserves credit. Nothing in it, in my view, is inconsistent with the experience of others over the same ground. No detail save the clock evidence is *a priori* impossible.

I lay stress on three points. (1) From Meyer's Peak the minor summit can be seen as well as the southern edge of the real top, and both points are clearly distinct. This, I argue mainly from a photograph which my son Hans, a Federal surveyor, took from the Finsteraarhorn in 1914 (see 'S.A.C.J.,'

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vol. l., p. 188, and 'A.J.,' xxxi. 280). Now, if the three men had remained half an hour on the minor summit, Dr. Meyer could easily make out that they were not on the highest point of the mountain. (2) The guides related that they had seen the lake of Thoune glittering in the sinking sun. Now, from the calculations of my son, from the summit of the Finsteraarhorn three different bits of the lake are visible, best between Hilterfingen and Gwatt at the lower end. Farrar wonders at the guides' recording detail, which does not thrust itself on the observer. But the two Valaisans may have been interested in a lake crossed travelling to or from Aarau in the autumn of 1811. (3) They planted a flag which Meyer observed from his resting-place with a telescope. And with the same instrument, which must have been an excellent one, he saw, on September 3, from near the Abschwung the flagstaff planted, on August 15, by the guides on the 'highest point of the Finsteraarhorn' which, from this point, cannot be mistaken. A few hours later, from the top of the Strahlegg, he observed his brother Gottlieb with one guide (he noted even the absence of the second man) planting a flag on the top of the Jungfrau. And this flag was seen afterwards from the Tschuggen and even from Unterseen. Thus, if Meyer was right in making out at 2 P.M. a flag at a distance of about 13 kilomètres, we may presume that he was not mistaken when he observed, at 10 A.M., a flagstaff only 3 kilomètres distant. Of Farrar's principal arguments there remains, besides the Abbühl-Hugi incident, with which I shall deal later, only the 'clock evidence.' Certainly, three hours from Meyer's Peak to the actual summit and, say, one hour and a half for the return, are times that seem *prima facie* improbable. But, in fact, they are little more than the 'fastest on record,' and I think Captain Farrar is wrong in assuming that on August 15, 1812, the conditions on the S.E. arête, between Meyer's Peak and the summit, were bad. The weather was fine all the day long and only the last rocks near the summit were glazed with ice. So it was, to say the least, not impossible for the three guides, not hampered by 'Herrschaft,' to make the ascent in three hours and the descent in half the time. And, of course, they were in a hurry.

The morning after the ascent, the party redescended to the crevassed Fiescher Glacier and crossed a gap 'between Fieschorhorn and Walcher,' *i.e.* the Grünhornlücke, to the Aletsch Glacier and the huts of the Märjelenalp. Inflamed eyes did not allow them to climb for six days, although the weather

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mended. It is said that Meyer used to swim among the icebergs of the Märjelensee.[28]

On August 24 they started once more to ascend the Finsteraarhorn from the West, but, arrived at the foot of the 'Grünen Horn,'[29] they found their fellow-travellers, Hieronymus Meyer, Dr. Thilo, and Gottlieb Meyer. They had come, the previous day, in dull weather, with some guides and porters from the Grimsel by the Oberaarjoch, the Rothhornsattel, and the Grünhornlücke. The united parties built a hut on the flowery 'Grüne Horn' where they remained two days and three nights, exploring the adjacent glaciers, experimenting on colours, and collecting plants and minerals. The weather was foggy and the proposal to ascend the Jungfrau was given up. On August 26 they measured a base line of 5500 feet on the glacier and then retired, in rain and snow, to the Märjelenalp. There they remained a week, but the bad weather allowed no climbing. So, as on September 1 the Aletsch lake was definitely frozen and the herdsmen left for the lower pastures, the majority of the party descended 'by the outlet of the wild Fiescher Glacier' to the Rhone valley and reached the Grimsel hospice on the afternoon of September 2.

Gottlieb Meyer with Volker and Bortes remained at the Märjelenalp, but leaving there at 5 P.M. on September 2 reached their hut on the 'Grüne Horn' at 9 P.M.

At 5 A.M. on September 3 they started for the Jungfrau.[30] They approached the summit which was visible from their tent, 'by the Eismeer between Mönch and Jungfrau. . . . Thinking to find a better way they ascended on the East[31] side of the

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[28] *Alpenrosen auf das Jahr 1852*, p. xxiv, note. The editor is not Zschokke (*d.* 1848), but an intimate friend of Dr. Meyer, and often heard him tell about his climbs.

[29] The bivouac there is indicated on the map annexed to the 1813 pamphlet. So is also that on the Gemslücke. The former is near the côte 2802 in the Siegfried map.

[30] Here also we possess two accounts, one by Zschokke in the 1813 pamphlet, and the original text as written by Gottlieb Meyer in 1812, published in the *Alpenrosen*, 1852. There are no substantial differences.

[31] This is, as we have seen, not accurate, but it corresponds with the lines dotted in for the routes of 1811 and 1812 in the 1813 map. So I maintain my opinion about the 1811 route, and think Gottlieb Meyer was in error on his map. In a wider sense we may even admit, as Dr. Coolidge suggests, that the expression 'opposite the last year's ascent' is correct, inasmuch as the route of 1811 passes *south*, that of 1812 *north* of the spur ending at P. 3388. At all

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Jungfrau, *i.e.* exactly on that side which is quite opposite to the side chosen last year.' Very slowly, as one of the guides felt unwell, they ascended steep slopes of snow and ice, till at 11 o'clock they stood beneath the bergschrund that seams the whole mountain under the Rottalsattel. With great trouble they reached that col; so the hope of the guides to find a better way came to nought. They had previously roped, but now extended the distances between each other, and laid the two poles brought for flagstaffs across the bergschrund. The leader crawled over and began to hew steps with an axe for hands and feet. After he had worked up the ice-wall above the bergschrund for some height, he secured himself as best he could, and fastened the rope to his stick, which he drove into the wall. Then Meyer and the other guide followed, one by one, in the same manner. Lastly the poles were dragged up and the same manœuvre repeated, till they stood on the Rottalsattel. Thence a sharp arête led to the summit. They had to cut steps and progress was slow. One of the guides collapsed and had to be left behind for a time. The others reached the summit at 2 P.M. This time it was a sharp point and they had to cut steps in the ice to sit in. They saw no trace of the former flag. While the guide fastened a black cloth to one pole and stuck it and the other pole in the ice, Gottlieb Meyer noted the readings of his barometer and thermometer. Meanwhile the other guide who had found some water joined them, but both were exhausted and afraid, and renewed the vow already made on the Finsteraarhorn, to go a pilgrimage to Einsiedeln, if the Holy Virgin assured their return. They began the descent after half an hour, descended the steps under the Rottalsattel turning their faces to the wall, and jumping the bergschrund. At 7 P.M. they were back in their hut. The next morning mist prevented the intended glacier measurements, and as at 4 P.M. it began to snow they gave up the idea of climbing the Mönch and descended to the Märjelenalp, whence Gottlieb Meyer returned to Aarau, no doubt by the Grimsel.

As the weather cleared up towards evening on September 2, Rudolf Meyer, with Abbühl and Huber, set out from the Grimsel to reconnoitre the *Strahleggpass*.[32] An old legend

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events the itinerary of Gottlieb Meyer is quite clear. It is simply that followed nowadays from the Concordia hut.

[32] For this expedition we have also two relations, one in Zschokke's pamphlet (pp. 38–45), the other in the *Alpenrosen* of 1852 (pp. xxxii–xxxvii). Both agree in the essential points.

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existed that about a century ago a certain Dr. Klaus with a hunter from Grindelwald crossed to the Grimsel over the glaciers, but nobody had followed these adventurers. The idea of the Meyers was to try to discover the legendary route, and also to explore the upper part of the Lauteraarglacier. The latter fell to Dr. Thilo and Hieronymus Meyer to do, and rendezvous was given for the night at a cave near the Lauteraarglacier, that had already served in the two passages of the Gauligrat mentioned above.[33] Rudolf Meyer and his guides went by the Unteraaralp to the source of the Aar and over the Unteraarglacier in five hours to the Abschwung, whence they studied their route of August 15 and observed the flagstaff on the Finsteraarhorn. Then they rounded the lower end of the Lauteraarhörner, penetrated into the ice-valley of the Strahleggfirn and mounted it for three hours to the foot of a rock-wall that formed the desired pass. They crossed the bergschrund by a snow-bridge and ascended in one hour the slaty rocks above it. So they arrived at the height of the Strahlegg just in time to see Gottlieb Meyer with one guide, planting his flag on the top of the Jungfrau.

We do not know exactly at which point Meyer and his men crossed the ridge dividing the Finsteraar basin from the Lower Grindelwald glacier. The dotted line in his map marks the passage at some distance from the 'Schreckhorn' (*recte* the Lauteraarhorn) over a ridge, shown incorrectly as connecting this peak and the Finsteraarhorn. So Dr. Meyer's passage may lie at the now-called Strahleggpass 3351 m., or (less probably) somewhat to the S.E. of it, near P. 3450, at the 'Alte Strahlegg' of the 'Climbers' Guide.'

At the first glance they could not make out how to descend on the Grindelwald side, but, as the guides (Meyer says 'we') had seen from the Finsteraarhorn that the Aar and Grindelwald glaciers were closely connected, they took courage and, turning to their left, descended quickly in the soft snow that balled under their feet, forming little avalanches, down to the foot of the 'Eishügel' (P. 3072 S. map). Had the slope been ice, the descent would have taken them too much time, as they were not well equipped—they had even left some outfit on the Strahleggfirn, as they intended to return from the pass and to accomplish the passage the next day with Dr. Thilo and

[33] The spot is marked as 'Höhle' on Meyer's map, rather too low. It is quoted 2614 m. in the Siegfried map and named 'Jägerherberge' as by the Meyers.

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Hieronymus Meyer. From the foot of the Strahlegg they saw, to their great relief, for nobody cared to return the same way, a way to a green 'Berglein,' to which 'alongside a precipice a snow band alternating with rocks descended.' So leaning on their sticks they glissaded down over the snow-slopes, and, avoiding the crevasses, they reached the pastures of the Grünenwäng. A further descent by the (vividly described) *mauvais pas* of the Enge and some rock steps brought them to the Lower Eismeer, which they crossed to the huts of the Stieregg. Farrar has well remarked on Meyer's calm yet vivid descriptions. Welcomed by the herdsmen, who could hardly believe they came from the Grimsel, they continued, after some rest, and arrived at Grindelwald towards 8 P.M. The next day they crossed the Great Scheidegg to Meiringen. There they waited for their fellow-travellers.

Dr. Thilo and Hieronymus Meyer, on September 3, had pushed their explorations to the foot of the Schreckhorn (properly Lauteraarhorn) and bivouacked at the 'Jägerherberge.' The next day they followed the traces of Rudolf Meyer's party to the Strahleggpass, but dense mists forced them to retire to the Grimsel. Together with Gottlieb Meyer, I suppose, they descended to Meiringen, whence, as the bad season was approaching, and they had, in an eventful campaign of six weeks, carried out their plans as far as the weather would permit, the whole party returned to Aarau.

The first report of these travels appeared in Höpfner's magazine.[34] 'A correspondent writes from Grindelwald, September 4 [1812], to the editor: "Yesterday evening, about 8 o'clock, Herr Rudolf Meyer (son (?)), of Aarau, arrived here by a very dangerous passage that had not been used for a century, over the Finsteraar- and Lower Grindelwald glaciers, accompanied by two Oberhasli men. They started at three A.M., from the Grimsel hospice, and were at three P.M. on the summit of the glacier-pass between Schreck- and Finsteraarhorn. They reported that, just as they arrived on the glacier-pass, they saw, through a telescope, people who can have been none other than the other brother [Gottlieb] with two Valaisans, planting a flag on the Jungfrau. They had been on the same mountain ('Eisgebirge') a fortnight ago [this is

[34] See *Gemeinnützige schweizerische Nachrichten*, Numbers 143, September 7; 146, September 12; 151, September 22, 1812. As these notices have some historical interest and are scarcely known to Alpine students, I translate them.

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of course a reporter's error], and also on the Finsteraarhorn. Early this morning they left for Meiringen. Their journey here was not intentional, as on the Finsteraarhorn glacier they left some clothes; but coming unexpectedly on the highest point [of the pass], and not daring to redescend, they continued their way to Grindelwald. So they gained the well-deserved honour of making a passage perhaps never tried by any mortal, and of exploring for the first time an entirely untrodden region. We hope that they will soon describe their travels in the newspapers. . . . The two Oberhasli guides [Abbühl and Huber] who, a fortnight ago, were with these gentlemen on the summit of the Jungfrau [this is a misstatement either of the guides or of the reporter, as they had never ascended the Jungfrau], told us that the ascent is easy and without danger. But to climb the Finsteraarhorn is, so they say, a very risky undertaking. In the descent, they feared to succumb and to be unable to stir ('*zu erwinden und nicht mehr von der Stelle kommen zu können*'). For six weeks these courageous mountaineers were on the watch in our savage icefields for a favourable moment. Herr Meyer considers that it is also possible to climb the Great Eiger [probably the Mönch is meant], but this is disputed by the Grindelwalders. On the other hand, they [the Grindelwalders (?)] think it would be more possible to reach the summit of the Wetterhorn, as one had been already at the foot of the supreme ice top."'

In No. 146 of the same paper (Sept. 12, 1812) appears the following: 'We should mention that J. Rud. Meyer, jun., mentioned in No. 143, is a grandson of the worthy patriarch J. Rud. Meyer, and son of Herr J. R. Meyer, who, with his brother, planned and carried out, from Fiesch in the Valais, the expedition to the highest summits. This young man, who comes fresh from the University as a Doctor of Medicine, has been known from his youth as a thorough climber. At Berne he interested everybody by the modesty and truth of his accounts and by the open and unpretending narrative of his observations and dangerous travels.'

It is obvious that Höpfner was anxious to make amends for some of his criticism of 1811.

In No. 151 of the same paper (Sept. 22, 1812), the correspondent writes from Grindelwald, dated Sept. 18: 'The day before yesterday, the bailiff of Interlaken, his son and I, with the loveliest cloudless sky, were on the highest point of the Itramen-alp [Tschuggen, 2523 m.]—this being the best station to observe the Jungfrau. We saw very distinctly through our

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telescopes the flag planted on the actual and highest summit (*eigentlichen und höchsten Spitze*) of the Jungfrau. It leaned already a little toward the right side; the black cloth waved around the staff was clearly visible and seemed (probably by an optical illusion, since everything seen against the sky-line seems tenfold greater) to be much higher and bigger than it really is or can be. Thus it is established, certain and without a doubt, that the Jungfrau and its actual highest point has been ascended this year. We three are perhaps the first to see this flag from here,' etc.

As late as 1842, Gottlieb Studer[35] was told by a trustworthy man that he had seen from Unterseen the Meyers' flag flying on the top of the Jungfrau in 1812. So all doubts about the Jungfrau had vanished.

This was not the case with the Finsteraarhorn. On August 2, 1815, Professor Wyss inquired for Abbühl at the Grimsel, to accompany him for a walk on the Aar glaciers; but he was away with strangers. Wyss was anxious to inquire for details of the ascent of the Finsteraarhorn 'which is still obstinately doubted by many.'[36]

Pfarrer J. Schweizer, who visited Abbühl at Imboden, September 13, 1821,[37] mentions 'the renowned mountaineer [Bergmann] who really climbed [*wirklich erstiegen hat*] the highest summit of the Finsteraarhorn and saw Meyer's flag flying on the Jungfrau.' The word *really* [*wirklich*] does not suggest any doubt, but distinguishes between Meyer's attempt and the actual ascent by his guides. The same author tells us some interesting facts about the two men. Aloys Volker, in the winter of 1814, met with a fatal accident between the Handegg and the Grimsel.[38] One of a large party, he had the misfortune to tread on a *Föhnschild*, and was hurled into the gorge of the Aar, whence his old comrade, Abbühl, next day recovered his body.

At the end of the 1813 pamphlet, the Meyers announced their intention to make a third journey through the icy regions of Switzerland. They were not destined to do this. Johann Rudolf Meyer I. died in 1813. His son, Joh. Rudolf II., followed him to the grave in 1825, and his grandson, Gottlieb,

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[35] *Topographische Mitteilungen aus dem Alpengebirge*, p. 131.

[36] *Reise in das Berner Oberland*, vol. ii. (Berne, 1817) p. 753.

[37] It was published only in the *Alpenrosen auf das Jahr 1827*, p. 319. See also *Deutsche Alpenzeitung*, vol. vii. (1907), p. 319.

[38] *Alpenrosen auf das Jahr 1827*, p. 352.

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in 1829. About the same time Hieronymus Meyer migrated to Munich. The probable cause was the critical financial situation of the family, which no longer permitted the very expensive explorations that 'Father Meyer' had inaugurated, and one easily understands why Dr. R. Meyer, in 1831, declined Hugi's invitation to revisit his old 'hunting grounds.'

For sixteen years the peace around the Jungfrau and the Finsteraarhorn was not disturbed by any traveller. Then two pioneers, Caspar Rohrdorff and F. J. Hugi, appeared on the scene.

(To be continued)

IN MEMORIAM.

FREDERICK GARDINER,

1850–1919.

FEW members of the Alpine Club can show such a long list of expeditions as Frederick Gardiner. Drawn irresistibly to the hills, he was never satisfied until he had climbed all the higher points, wherever he happened to be. No mere peak-bagger, but a mountaineer in the truest sense of the word, he loved the mountains, and liked above all to visit some remote part of the Alps. I think he took a greater interest in exploration than in actual climbing, and he remained true to this exploring instinct after reaching the age when others gravitate towards the more frequented parts of the Alps, attracted by hot baths, digestible food, and comfortable beds.

When a boy of eleven, he went up Snowdon from Beddgelert with his father; this was his first experience of hill-climbing.

Seven years later, he stood on the top of a Swiss mountain, the Rigi, and watched the sun rise over the Alps on a perfect summer morning—a sight he never forgot.

In 1869, he made his first ascent of a snow mountain, Monte Rosa, and wrote a very youthful and racy account of it, painting in lurid colours all the terrors and dangers he encountered, and describing how his face was so badly blistered that four or five ladies kindly lent him jars of rosewater.

In 1870, he made several expeditions, the most interesting of which was the ascent of the Matterhorn in company with Lucy Walker and her father. How much Gardiner owed to his lifelong friends and neighbours, the Walkers, it is difficult to say, but their influence was undoubtedly great. In 1874, we find him travelling with Walker, Moore, and Grove in the Caucasus. He always looked back on that tour with pride and liked to recall, how, on reaching the top of

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Elbruz, the others said: 'Let the young one go first, it means more to him.'

Gardiner was also exceptionally fortunate in having Peter Knubel with him during his first years of climbing. Under his guidance he became an expert in the craft, and acquired a wide experience of the varying conditions of ice and snow. Their expeditions were made in various parts of the Alps from Dauphiné to the Ortler; beginning in 1870, they continued together yearly until 1878, when Fred Gardiner dispensed with guides. A notice of the most important of these expeditions will be found in our President's article in 'A.J.' xxxii. 94. This gives a very interesting account of Peter Knubel's Führerbücher, and states: 'Knubel recounts that, of all the climbers he has accompanied, Mr. Gardiner was unexcelled, and that his staying powers when they climbed together in the 'seventies were simply marvellous.'

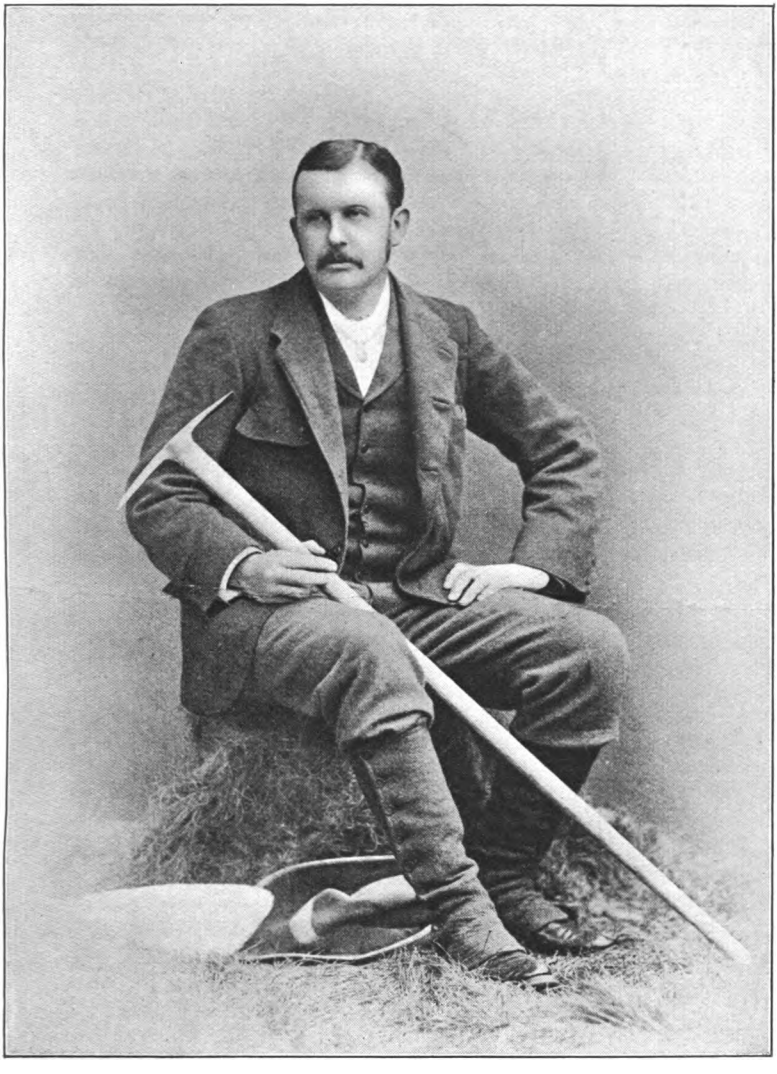
When I first met Gardiner, in 1877, he was indeed a fine, upstanding fellow, well over six feet high, in the prime of manhood. He had a good tenor voice, with which he liked to awaken the mountain echoes; the sound of his merry yodel still comes back to me with these early recollections. It is amusing to recall that, when my brother and I were photographed with him, the photographer persisted in calling him 'Le bel Anglais,' 'Le Lord Byron,' and treated him as the central figure, using us as mere accessories, even telling us what expression to put on to enhance the effect: we had indeed to deal faithfully with Frederick afterwards to restore the balance.

Various accounts of his expeditions with Knubel appeared in the JOURNAL. In 'Climbs round Zermatt and the Riffelalp in 1876' ('A.J.' vii.), it appears that he made the ascent of Monte Rosa, without guides, with Messrs. E. Gage and Bishop.

I need hardly say that Gardiner's experience and training were invaluable to us in 1878. His love of exploration, gift of organisation and previous experience of Dauphiné in 1873 led us to choose that district for our first essay in guideless climbing. The Société des Touristes du Dauphiné had already begun building refuges, but there was still a great lack of shelter. Hotels also were few and so primitive that it was necessary to lay in stocks of tinned meats, soups, and wines. Thoroughly in his element, Gardiner arranged everything admirably. His special weakness, leaving a bottle of champagne in the snow at the foot of a peak to await our return, received due consideration.

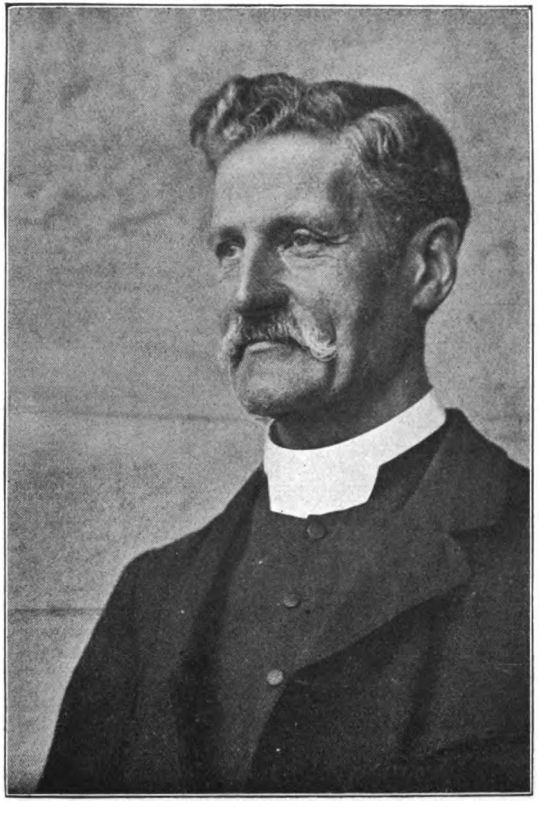
In the notice of my brother Charles, I have already mentioned Gardiner's chief climbs with us, especially the ascent of the Meije and the traverse of the Jungfrau from the Wengern Alp. After the ascent of the Meije, my brother was called back to England, and Gardiner and I went on climbing for another week. In it we succeeded in making three new expeditions—the Col Tuckett and the peaks Bonvoisin and Verdonne, and ascended three other peaks and crossed two more passes. It was a very hard seven days' work,

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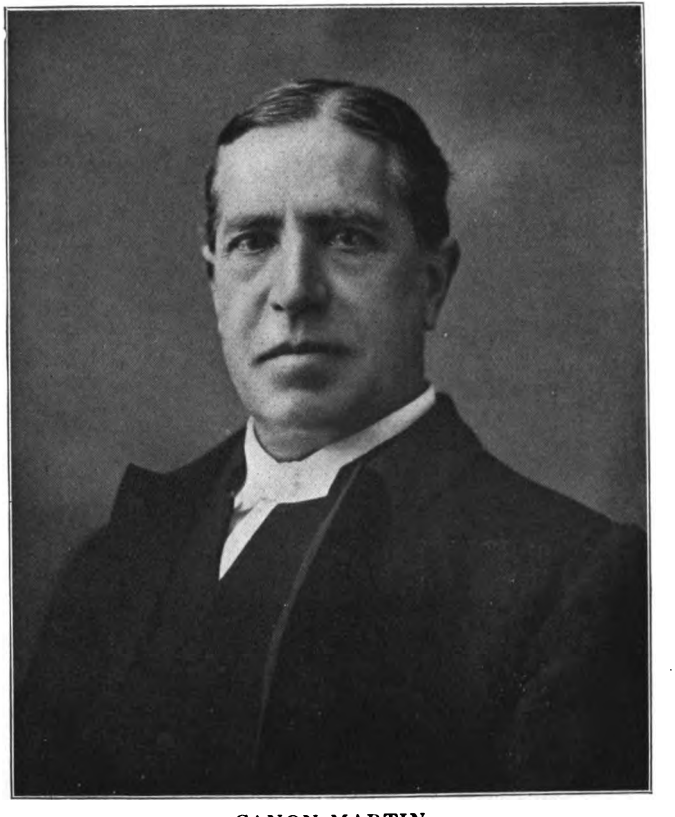


F. GARDINER

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CANON SLOMAN



CANON MARTIN

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all the more toilsome as there were only two of us to do it; but we had no disputes of any kind either about sharing the work or what direction to take. Fred Gardiner was indeed one of the most good-natured men I ever met; this quality, combined perhaps with his ability to speak French well, made him the special favourite of our two Dauphiné porters. These men came from Vallouise: one, Joseph Lagier, an old soldier; the other, Simon Barnéoud, a shoemaker. They were more than faithful; no trouble was too great for them to take in our service, they even went especially to pray for us when we were on a difficult expedition—I suspect they put in an extra prayer or two for Gardiner.

In 1880, he climbed with Coolidge and the Almers. He joined them again in 1885, and went with them each year, until 1893; after that, Coolidge dropped out, and Gardiner continued climbing with members of the Almer family every year until the War. When old Christian retired, Rudolph joined his brother, young Christian; while later, Peter took the place of young Christian, and in 1910 we find Rudolph and his son accompanying him. He was very much attached to Rudolph and Peter, but most of all to Rudolph, who actually accompanied him twenty-four years in succession. During his thirty years' climbing with the Almers, a remarkable number of interesting expeditions was made and a great amount of exploration accomplished.

In looking through the careful notes which Gardiner kept of all his journeyings one is impressed with his methodical manner of tackling one district after another, visiting each valley, climbing all the higher peaks, and recording all the details of each expedition. The number of these expeditions alone is over twelve hundred, most of them above the snow-line. Accounts of many have already appeared in the JOURNAL, but many interesting climbs must necessarily remain unmentioned. In looking through the numerous volumes of his diary, I was astonished to find that when he was fifty he went up the Jungfrau with his son George, in four hours and a quarter from the Rotthal, descended to the Mönchjoch in two hours, and 'then raced down'! George had already done enough to qualify for the Alpine Club when illness and early death cut short a promising career.

When Gardiner visited India in 1913 his climbing days were nearly over, and he contented himself with a view of the Himalayas from Darjeeling and the sight of Everest at sunrise from Tiger Hill.

He was married in 1881 to Alice, daughter of Josiah Evans of Haydock—a very happy union. Love of the mountains brought them together and love of the mountains remained with them to the end. Together they visited many districts and shared many good climbs: in the Oberland alone they ascended the Mönch and Jungfrau, and crossed the Wetterhorn once in summer and once in winter. That winter ascent left vivid impressions of extreme beauty, both from the summit and from the Dossen hut at nightfall. The

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younger members of their family often joined in the later expeditions.

During his long Alpine career, Gardiner made many climbing friends—most of his friends indeed were members of the Alpine Club. He was elected a member in 1879 and a Vice-president in 1896. The Editorship of the JOURNAL was also offered to him, but this he declined, as he did not feel equal to the task.

The later years of his life were troubled with rheumatic gout. The worries and anxieties of the War also did much to break down his health. He lived, however, to see the dawn of peace and to rejoice in the safe home-coming of his sons.

Such a long and remarkable climbing career deserves a fuller appreciation than this, and it is a matter of regret to me that the notice was not written by one whose knowledge of the Alps is wider than mine; but I climbed with him in what he liked to call the golden age of our youth, and I can at least bear witness that he was one of the best of comrades.

LAWRENCE PILKINGTON.

JOHN HERBERT WICKS.

IN the early hours of Thursday, July 31, 1919, John Herbert Wicks passed away at the age of sixty-seven.

During the War he had, like so many others, been greatly overworked, and he had lived in comparative seclusion. But after the Armistice things changed. His old hospitality was renewed, and he saw more of many of his friends.

On July 24, Wills and I were staying at Queen's Gate, and Bradby came to dinner. The old climbing party of the last ten or twelve years was gathered together for the first time since 1914, and seldom have we spent a happier evening. Not one of us dreamed that this was to be our last meeting. Not one of us thought that the call which must come to us all would first come to Wicks. We hoped that many happy years were yet in store for him, and though we knew that an affection of the heart, not serious enough to interfere with less strenuous avocations, would debar him from doing any serious mountaineering again, we yet expected to see him on the snows next year.

The Fates ordained it otherwise. Within a week he had passed. But he kept at work and at play until a few days before the end, and the end came easily. Though our loss is irreparable, these are things to be thankful for. Nor was there any 'sadness of farewell.'

J. H. Wicks came of an old Gloucestershire family, but he was born in London, educated largely in London, and remained essentially a Londoner all his life. He entered his uncle's firm (Jacob Walter & Co., Brazilian merchants) as a youth, and

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became the senior partner many years before his death. His interest in its activities was profound, and his grasp of figures and detail appeared to be instinctive. His work brought him into intimate relationship with many leading men in leading industries, in City circles, and in Government offices in this country, and with political, administrative, and business men of prominence in Brazil. He spoke Portuguese fluently, and he knew Rio as well as he knew London.

But it is not with this aspect of his career that this memoir has to do. His youthful vigour was intense, and found outlet in football, hockey, rowing, walking, and mountaineering. This last was destined soon to outshadow all the rest, to divide with his business activities the chief interest of his life, and to prove a twin source of his friendships and affections. He never married, but had many friends, and a circle of deeply attached intimates who were always sure of a warm welcome at Queen's Gate, and at his cottage near Goring.

A man of few words and singular silence, he had, at the back of a somewhat austere bearing, the heart of a child, while his practical thoroughness and downrightness were relieved by a whimsical sense of humour, which, though only occasionally discovering itself spontaneously, was readily evoked.

Wicks joined the Alpine Club in 1885, and soon became a prominent member, a position which he retained until the end. No face was better known at the meetings, and he served the Club well and faithfully in many capacities. He was Honorary Secretary (1893–96) during those strenuous years when much extra work was demanded and ungrudgingly given by the search for new premises, and the eventual removal of the Club in 1895 from its first home in St. Martin's Place to its present abode at the head of Savile Row. Before that he had served on the Committee, and since he has sat at various times as 'Extra Member' and as Vice-President (1904).

Though he contributed but one paper to the ALPINE JOURNAL,[1] his sound criticism and wide knowledge were ever at the service of all who might want them, and he helped materially with the new edition of Ball's 'Alpine Guide,' and with the Kurz Guide to the Chamonix district, an area with which he had an exceptionally thorough and intimate acquaintance.

Wicks's climbing career began in the mid-seventies in the Lakes and in Wales; and until well on in the present century he returned to these old haunts, varied by visits to Glencoe, Ben Nevis, or Skye each winter.

I have found some difficulty in tracing the date of his first visit to the Alps. It was probably in 1880, but it may have been in 1879, and the first certain date I have is 1881. Anyway his qualification,

[1] 'Two Peaks and a Centre,' *A.J.* xv. 333.

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when he came up for election was for those days a very exceptional one. Over fifty expeditions are recorded and they include an unusually large number of passes in the Pennine Alps, a few peaks in the Oberland, and a few in the Chamonix area. An ascent of 'Mont Blanc from Courmayeur,' is mentioned, and most of the chief summits around Zermatt and Saas. The Dent Blanche and two traverses of the Matterhorn are included, and a new route was made up the Tête du Lion from the Stockje.

During these years and the four which followed, he climbed with a number of different guides. Theodor and Adolf Andermatten were I believe his regular guides in the earlier years. Gabriel Taugwalder and Ambros Supersaxo were also with him a good deal. One year he was with Alphonse Payot, and he made odd climbs with both Alfred and François Simond. For two years Emile Rey was his leading guide, and in one of these Johann Fischer was the second. William Muir was his companion during most of this period, but was replaced in 1889 by H. W. Henderson.

But it is as a guideless climber that Wicks was best known, and will be most remembered, and he formed the central figure of a party which, ending its activities with the outbreak of the War, had made twenty-five Alpine campaigns. Of these C. H. Pasteur joined in one, J. H. Gibson in two, Ellis Carr in two, G. H. Morse in four, T. L. Kesteven in five, W. A. Wills in six, and E. H. F. Bradby in eighteen, while Wicks and I each took part in twenty-two.

During these years some 250 expeditions were made, and Wicks shared in about 220. They included a good many unsuccessful attempts on rather difficult rock peaks, like the Requin, which was attacked several times in its virgin days, the Petit Dru, and the Ago di Sciora. Unsuccessful expeditions there were too upon the snows, from the weather, as on the Lyskamm, and from bad snow, as in the Couloir of the Verte. But as a general rule the expeditions were successful and included peaks and passes—small and great—in almost every district of the Alps: Cottians, Dauphiné, Tarantaise, Graians, Mont Blanc, Pennines, Oberland, Bernina, Bregaglia, Brenta, Ortler, and Dolomites.

It may be interesting to recount how this enterprise initiated. It was thus, and, like so many human undertakings, largely accidental in its inception. At the end of July 1889, many climbers were gathered at the Montanvers. Wicks and Henderson were nearing the end of their engagement with their guides, while Morse had just parted with his. I was there, too, with my wife, but though I had joined in an expedition now and then, I was not out for serious mountaineering that year. All four of us had been on the mountains together both at Wastdale and in the Alps, and all had had some ten years or so of experience with good guides. The weather was fine, and we all had a few more days of holiday in front of us.

On August 2, it occurred to Wicks and Henderson to give Morse and me a pleasant surprise, and they invited us to go up the Grand

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Dru with them next day. We were to go on two ropes, one guide leading each. At lunch time the guides were informed of the project, and the afternoon was spent in preparation, but before dinner a hitch was in evidence. The guides had much confabulated and had come to their employers and said that they declined to go unless two more guides were engaged. This was just the kind of contingency which was sure to show the stuff that Wicks was made of. He said little to the guides, but told them to give him the rope and the sacks, and that we would make a 'promenade' alone. Then he came to us and recounted what had happened, adding, 'there is only one thing to be done—we must go up the Dru without them.' A council ensued in which I was perhaps the wet blanket. The Dru, without sleeping at a gîte, was very long, and I was only in very moderate training. I might be too slow for the job, and there was a possibility that we might fail from this or other causes. It would be a mistake to risk failure: Why not try the Charmoz? It was much shorter, and Wicks at any rate knew the route, for he had been up with Muir and Emile Rey, and had made the first ascent of 'the curious pinnacle, most irreverently known as Wicks's Stick.'[1]

And so it was settled. We started at two, and reached the top at 10.30. Alfred Simond, who was in our secret, was looking out for us, and flashed sunshine into our eyes with a large mirror which he had brought out, and placed beside the telescope, thus assuring us that we were not unobserved. Thus we made what was, for all of us, our first serious guideless climb in the Alps, and what was also, I believe, the first guideless ascent of the Charmoz. We had found the thing well within our capacities, and had tasted a new and keener flavour than any of which we had had previous experience.

Next year Wicks, Morse, and Carr had a successful guideless season in the same district, and I joined them in an odd expedition. In 1891, C. H. Pasteur took Carr's place for the first half of the holiday, when they ascended the Meije and traversed the Ecrins, while Gibson replaced him later on at the Montanvers, where again I joined them once. In 1892, Gibson was once more the third man, and in 1893 I joined the party for the first time as a regular member, when we had a very successful season in the Graians and at Courmayeur. From thence onwards, until the war broke out, there was no break, though there were three seasons—1899, 1901, and 1907—when Wicks was unable to come out at the same time as the rest.

Most of the expeditions were entirely guideless, but a guide or porter was often employed as far as the roping place, and occasionally the whole way as a carrier. Occasionally, too, we persuaded an old friend, like Emile Rey, Ulrich Almer, or Alfred

[1] Mummery—*My Climbs in the Alps and Caucasus*, p. 118.

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Simond, whom we were lucky enough to find free, to accompany us on an expedition.

In twenty-two out of the twenty-five campaigns, Wicks was, as already stated, a member of the party, and certainly in three out of every four of the expeditions the party was purely amateur. He did his share of carrying, step-cutting, and leading. It was our custom to take turns, and speaking roughly he led one expedition out of three. But he was a true sportsman, and cared not what position on the rope he occupied. He was equally good everywhere, was always safe, and instinctively did the right thing in emergency.

It is not necessary to give a complete list of Wicks's expeditions during these years, but a selection must be made if this memoir is to convey any idea of his Alpine career. Space forbids details, and lists of climbs never make very interesting reading. A chronological or topographical record would be the simplest method to adopt, but perhaps a somewhat less monotonous one will be to divide the expeditions into types, and cite examples, chosen either on account of the interest of the climbs themselves, or as indicating the various districts visited.

Of the few new ascents by far the most important was that of the Pic Sans Nom on the Dru-Verte Ridge, made by Wicks, Morse, and Carr in 1890, and well described by Wicks in the paper already referred to. This somewhat insignificant-looking peak is of equal height with the Dru, and its summit is at least equally difficult of attainment. The fact that they succeeded in conquering a peak which had twice baffled Ulrich and Hans Almer is a signal tribute to their mountaineering capacities. The Évêque, on the Verte-Moine Ridge, with Mont Rouge de Gruetta and Mont Rouge de Peuteret, complete the little list of virgin peaks.

Of new routes there were a good many, and several minor ones are omitted from the list which follows. Charforon (E. arête); Aiguille de la Brenva (traverse N. to S.); Aiguille de Talèfre (W. arête); Aiguille de Triolet (S. arête); Aiguille d'Argentière (S.E. arête); Mont Collon (N.W. arête? second ascent); Jumeaux de Val Tournanche (E. Face. The ascent of this rock wall took 9½ hrs. not including halts); Aletschhorn (S.E. arête); Schreckhorn (S.W. arête—descent by ordinary route = up and down in a day from Grindelwald); Corno Bianco (E. Face and N. arête); Ferro Occidentale (S. arête). A rather striking variation on the Cima del Largo perhaps deserves mention, and one may add the great S. Face of the Dent du Requin, with Alfred Simond leading, but by a route which had been discovered by us on a previous exploring expedition. This was one of the longest and best rock climbs we have done, and, going up and down the same way, we were on the rocks (including two hours on the top) from 5 A.M. to 7 P.M. On another new climb, Ulrich Almer led us up the W. Face of the Wetterhorn, after attempting and failing on the unclimbed S.W. arête.

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Most of the foregoing climbs were traverses, and they add to the list of expeditions of this type. These include the Ecrins (S. to N.); the Grand Paradis (down by Col de l'Abeille); Mont Pourri (up by N. arête, down by W. arête); Levanna; Rutor; Bec de l'Invergnan; Herbetet (up by S. arête); Aiguille des Glaciers (up by S.E. arête, down by S. arête); Mont Blanc (1. up by Midi route), (2. up by Aiguille du Goûter), (3. summit omitted, up by Brenva route, down by Corridor)[3]; Tour Ronde (from Courmayeur and back, up by Col du Géant, down by Brenva Glacier); Charmoz (N. to S. and S. to N.); Grépon; Mont Pleureur; Aiguilles Rouges d'Arolla; Aiguille de la Za; Dent des Bouquetins; Dent d'Hérens (up from Breuil, down to Valpelline); Matterhorn; Monte Rosa; Zermatt Breithorn (up by N. face); Klein Matterhorn (up from N.); Jungfrau (up from Roththal, down to Wengern Alp)[4]; Piz Bacone; Piz Bernina (up by Scharte); Ortler (1. up by Hinterergrat), (2. up by Hochjoch); Königsspitze; Zebru; Cevedale.

In looking through my notes of the climbs above alluded to, all sorts of intimate memories of Wicks and his ways have crowded back, and space may be found for one which was very characteristic of him, as a man of deeds, not words. We had climbed the Jungfrau from the Roththal hut and arrived upon the summit at 10.50. As we sat on the top, Bradby and I discussed which route we should descend by—the ordinary one by the Mönchjoch, or the more formidable one to the Scheidegg, for which we thought the hour was rather late. Wicks, half smoking and half sleeping, gave an occasional grunt but added nothing to the discussion. But when our half-hour was up, he suddenly rose, relit his pipe, and started at a trot towards the Silberlücke. And very finely did he lead us down by one of the grandest ice routes in the Alps. There was much step-cutting in hard ice above the Silberlücke bergschrund, and again in the Guggi ice-fall, but he got us unroped on the far edge of the Eiger Glacier just as dusk was melting into night.

That was a long day, for starting from the Roththal at 2.30 we did not reach Grindelwald till after midnight. But we were used to long days, and generally preferred one long one to two short ones. Consequently we very seldom slept in huts, and the bulk of the expeditions already referred to were made in a single day. That was indeed the rule, and the Trélatête from Courmayeur, the Dent Blanche from Arolla, Bietschhorn from Ried, the Roseg from Pontresina, and the Disgrazia from Masino are a few more good examples. But some of the longest days were on the passes, the longest of all being the Col de la Brenva (already mentioned under Mont Blanc) from Courmayeur to the Grands Mulets;

[3] Wicks had also been up by the Dôme route (?) or the Rochers (?)

[4] Another good climb on the Jungfrau was an attempt on the E. arête.

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while another delightful expedition, very easily made in a single day, was the passage of the Jungfraujoch and Mönchjoch, starting from the Wengern Alp about midnight, and returning there to dinner by the train from Grindelwald.

But it was as a rock climber that Wicks was perhaps best known, and on certain classes of rock, and notably on smooth slabs, he was exceptionally expert. And he had a very fine eye for a route both in general line and in detail. He was not the first to lead over the top of the great tower on the Dent Blanche—in lieu of the dangerous route round it which was followed by all the early guides—but he was, I think, undoubtedly the first to apply the same method to the somewhat similar tower on the S.E. arête of the Aiguille des Glaciers, which Alexander Burgener had skirted by letting himself down with a fixed rope into the icy couloir on the right. I was looking about for the remains of this rope, which was said still to be there, when, on looking up, I saw Wicks at the end of a long lead, well up on the face of the tower, which, though so formidable in appearance, proved to present no great difficulties.

To the good rock climbs already mentioned may be added the S. Aiguille d'Arves; the ascent of all the points on the Broglio Ridge; the Aiguille Noire de Peuteret (Rey leading); Jétoula; most of the peaks on the Val Tournanche Ridge; the Sciora di Fuori; the Badile; the twin peaks of the Sass Maor (Madonna by Winkler Kamin); the Pala di San Martino; the Cimone della Pala; and the Croda da Lago.

Of other peaks not yet referred to, one may select a few well-known ones. Monte Viso, Grande Casse, Grande Sassière, Grivola, Tour Noire, Grand Combin, and the Eiger, on which we tried to make a new route coming down, and got benighted—a mishap which occurred to us on one other occasion only.

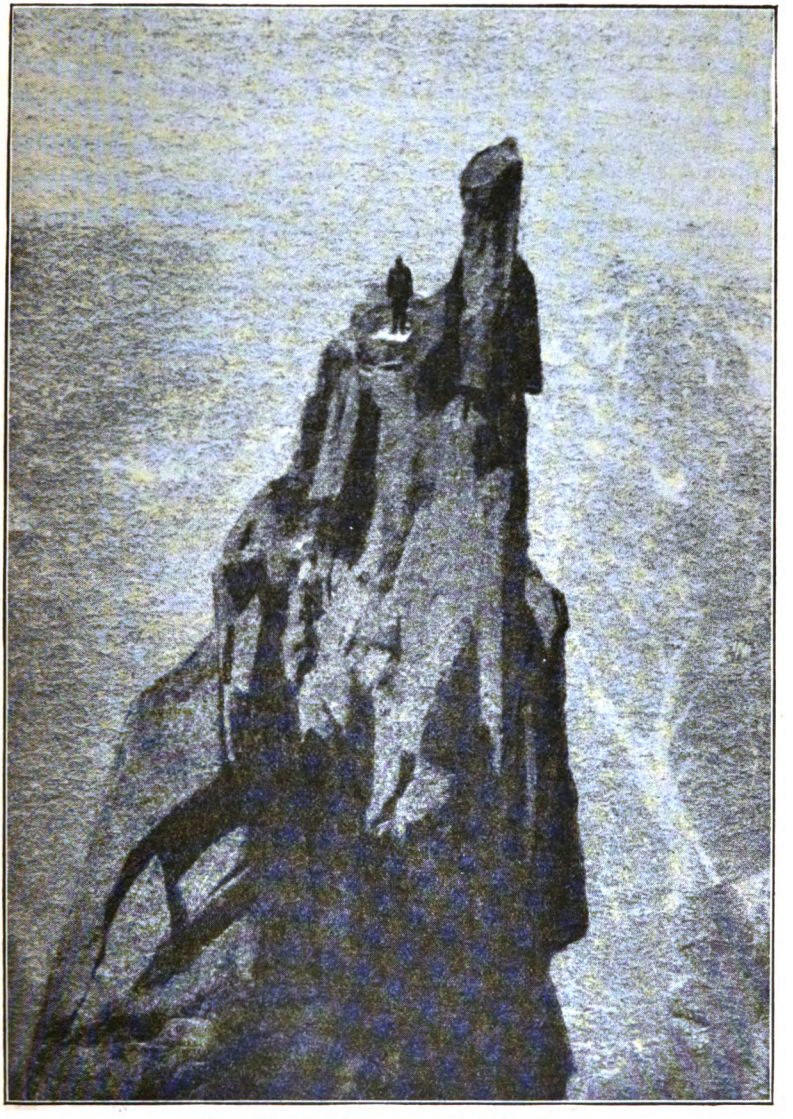
The minor climbs were more numerous than the great mountains, and often quite as full of interest, and the list of passes rivals that of the peaks. Many of our best expeditions were indeed on the passes, and a day on the Schmadrijoch, with an incompetent guide, engaged to make a third on the rope, was full of varied adventure, and proved one of the most exciting and exhausting of the whole series. Again, in no class of expedition was there more charm, more interest, and more call for snowcraft and guiding qualities, than on the many occasions when, in districts visited for the first time, a way had to be found over unknown glaciers into unknown valleys, often badly mapped, and often in foul or foggy weather.

Enough has perhaps been said of Wicks's doings, though I find that only about a third of his guideless climbs have been referred to, and not more than a tenth of those he made with guides. In the central Alps there were but few important peaks which he had not ascended. Many he had climbed more than once, and a good few several times.

If, before closing these imperfect notes, any attempt is to be

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made to review Wicks's qualities as a mountaineer, one must, while recognising his qualities as a climber, as good on snow and



THE 'BÂTON WICKS' ON THE CHARMOZ.

ice as on the rocks, unhesitatingly accord the first place to his capacities as a guide. Much is implied in this; experience,

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knowledge of mountain topography and snow conditions, sound judgment, correct action in emergency, and a 'guiding instinct.' It is difficult for those who were much with him to think of him otherwise than as a guide; and personally, when beset year by year by friends at home with the reiterated warning, 'I hope you never go without good guides,' I have answered, without any feeling of prevarication, that I never did, and that I had been with the same for many years.

Wicks found old routes and made new ones in almost every district of the Alps, in regions he had never visited before, and in all conditions of ice, snow, and weather; and if difficulties or dangers were encountered, he led his party safely out of them. What more can be said of any guide? He had done enough to earn a guide's diploma in a dozen different centres. From among the best guides he had learned the elements, and but for the knowledge thus acquired he could never have mastered the higher mysteries which the mountains alone can teach. His debt to the guides was great, and no one had more veneration for the qualities of character and skill displayed by the best of the guides than he had. Eventually he became almost as one of them, and no one recognized this more fully or more generously than the guides themselves. It was only by those of the first rank that he was excelled as a mountaineer, and even among these there are but few with whom I should feel 'safer' on any Alpine peak or pass, and in any weather, than with my dear old friend.

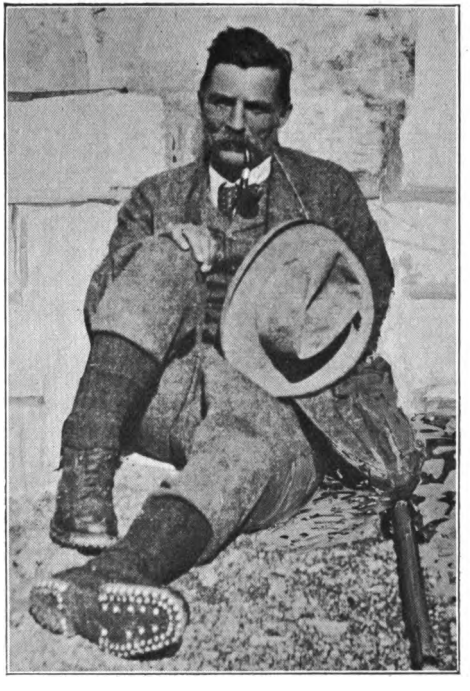
He has left us. No more will his axe ring upon the ice, nor his fingers grasp the crag. But his name will live among us and among the mountains; and it is fitting that it should live in a special way upon the Charmoz, as he loved it best of all. He had climbed this mountain five times (four guideless); he had traversed it in both directions; he had made it the scene of his first guideless expedition; and under its shadow he had spent his last day in the Alps (July 29, 1914). On the summit ridge of the Charmoz stands a giant monolith of the granite that Wicks loved. His name has become indelibly associated with it, and to the Savoyards it has come to be universally known as 'Le Bâton Wicks.' As such it is figured in Guido Rey's book[5] and as such it is referred to in other publications. Thus to generations which knew him not will his name be handed down, and will live among the glorious Aiguilles with which his Alpine career was so closely associated. Surely no mountaineer will again have so grand a monument, or one so nobly mounted.

C. Wilson.

[Wicks had not sat to a photographer for at least twenty to twenty-five years, and a thoroughly satisfactory portrait does not appear to exist.]

[5] *Peaks and Precipices*, p. 71.

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1906

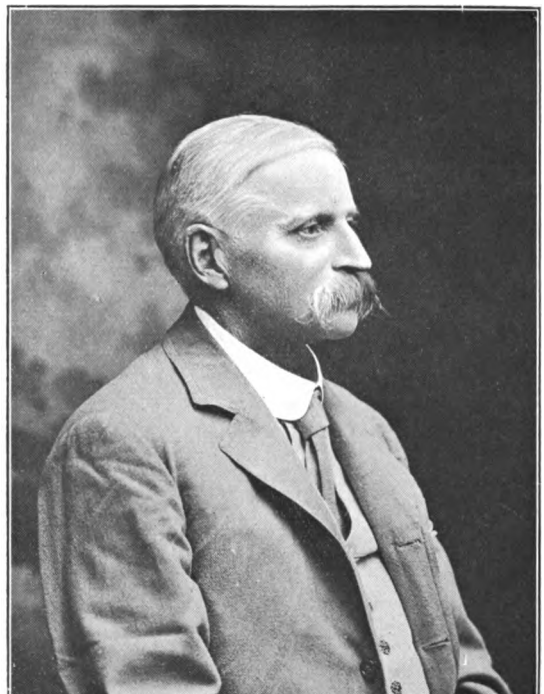


1913

J. H. WICKS

(FROM SNAPSHOTS)

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CHARLES CANNAN



WALTER LARDEN

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CHARLES CANNAN

(1858–1919.)

In Charles Cannan the Club has lost a distinguished member and a very staunch supporter. His keen interest in mountaineering and in everything that concerned the Club remained, to the end of his life, unabated by the fact that it was seldom possible for him to be present at our meetings. He served on the Committee from 1912 to 1914.

I made Cannan's acquaintance when I went up to Oxford in 1879, and the following summer we made up a reading-party to the Lakes with some other friends. How it came about I do not remember, but we settled ourselves at Ulpha in the Duddon Valley —a spot which possesses two enchanting bathing-places, but as a centre for seeing anything of the Lake Country has no merits whatever. All the party were working hard; but we allowed ourselves one holiday, and tramped over Mickledore to Wastdale Head. Cannan and I fell in love with the place at once, and returned there for the following Easter. I repeated my visit three or four times; but Cannan's parties at Wastdale went on for many years, and became an institution, of which more will be told later. Here I will only mention the curious fact that we never discovered the existence of the Napes Needle, and to this day I have never consciously set eyes on it except in a photograph.

Cannan's imagination was fired at once by the idea of mountaineering, and it was a settled thing that he should come with me to Switzerland after he had secured his First in 'Greats,' in the summer of 1881; he was an Alpine climber in spirit before he ever saw the Alps. My knowledge of Alpine literature in those days was confined to Whymper's 'Scrambles,' and 'Peaks, Passes, and Glaciers'; and I was obsessed with the idea of doing the High-Level Route, and of high-level routes generally. So our programme would not now be regarded as an ambitious one; but we crossed a large number of fine passes and saw a lot of country, and I don't suppose that I have ever had a more enjoyable trip. At an early stage of it occurred the Ulrich Lauener episode described in 'A.J.' xxx. 314. It closed with an attempt on the Aiguille de Blaitière, on August 5, which, owing to various untoward circumstances, fell short of success; but we consoled ourselves by watching Mummery engaged in his first attempt on the Grépon.[1]

I don't think Cannan missed a season for the next nine years. He was elected to the Club in 1885, with a goodly number of the great peaks of Zermatt and the Oberland to his credit. I was with him in 1884 and again in 1886, when we commenced operations by starting for the Balmhorn with a boy of fifteen belonging to the

[1] *Cf.* Mummery, *Climbs*, pp. 126–7.

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Schwarenbach Inn. We reached the Klein Balmhorn successfully but a regular hurricane was blowing, and the boy was obviously scared at the idea of going further, so we decided to leave the true summit for another day (which never came). This was his only venture, so far as I am aware, in the way of guideless climbing. It was a bad year, and later our two most arduous and interesting expeditions ended in total or partial failure; but we retrieved our defeats to some extent in 1887.

After this, for some years, we did not climb together regularly; but our paths crossed from time to time at Saas Fee and Cogne, in Dauphiné and the Maderanerthal; and we joined forces in a few expeditions, among which I remember particularly an ascent of the Grosse Windgälle by a large party comprising Mrs. Cannan and two other ladies. We were rather under-guided, and had considerable difficulty in getting off the mountain. In 1899, I accompanied Cannan and his wife in a delightful trip through the Tarentaise, and in 1902 paid a short visit with him to the Tödi group, of which some account is given in 'A.J.' xxiii 450. I never was with him in the Alps again, but for many years afterwards we fought our battles over again during periodical week-end visits to his pleasant Oxford home. Mountaineering appealed to him in nearly all its aspects, and one feature of it, of which he had a specially lively appreciation, was the society of guides. He climbed with many guides at various times, and made friends of nearly all of them. I have before me a letter from him written last July, under the impression that I was about to start for Switzerland, in which he displays minute solicitude about the welfare of the two he knew best, J. J. Truffer and Moritz Inderbinen.

A. L. M.

I FIRST climbed with Cannan at Wasdale Head, in March 1888. We were in the Alps together afterwards; but Wastdale began it. Cannan and I were then examining in the Schools at Oxford, and the rest of the party consisted of two Trinity undergraduates, Messrs. A. E. W. Mason and Thornton. It was a kind of reading party, in fact; we worked all the morning and walked and climbed all the afternoon. It must not be supposed that climbing in the 'eighties—even the late 'eighties—meant scaling the face of Scafell and the arêtes of Great Gable; these justly popular expeditions had not then been placed before the public. Mr. Haskett Smith was reported to have performed wonderful feats, but it was not the ordinary man's business to imitate him—just yet. Even the easier and now more familiar of the 'first-class' ascents—such as the North Climb of the Pillar or Moss Gill, or the Pinnacle from Steep Gill—were not generally known. The Matterhorn of the district was the Pinnacle by the short way from the top of Scafell. Primarily, we were out to climb ice- and snow-filled gullies: to get as near

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to Alpine conditions as possible. That was a game after Cannan's heart. He was an active climber on rocks; but what he particularly liked was the Alpine mixture of rock and snow that was to be had at Wastdale Head in early spring—particularly that snowy spring of 1888, when you could glissade almost to the valley level, and the couloirs were choked with hard *névé*. Such a place as the Central Gully of Great End is a mere rough scramble in summer: in spring it may be an Expedition, when every pitch is an ice-slope, and you have to force your way through a cornice at the top. So we had great afternoons there and elsewhere—notably in Deep Gill, then a novelty; for the climb straight up over the two pitches was first recorded in '86 ('A.J.' Nov. '86). I remember there was so much snow in '88 that we practically walked up the first pitch; and the second being a mere mass of ice, Cannan cut his way straight up through the middle of it. All this was an excellent preparatory school for the Alps; and it was Cannan who was the instructor. His companions, *N.B.*, were not always brought to Wastdale because they could climb, or even wanted to. Certainly most of them took to it; but they were not often certificated experts; and it was a great testimonial to Cannan's guiding that none of the young pupils whom he piloted in steep places ever came to grief, and nearly all wanted to go with him again. I was with him in three or four springs from '88 onwards. Among other companions of those days were Messrs. J. E. King and C. Cookson, and Dr. Collier. Afterwards, Wastdale Head began to be more like Zermatt, and the cheap Press published articles on 'The Brotherhood of Peril.' However, nothing could really spoil it—even though the old association of Row Head and Burnthwaite (are the Metaphysics of Aristotle still read at Burnthwaite?) became only memories, and Cust's and the Central Gully gave place to more 'serious' expeditions, and, in short, much water flowed under the stick which made a bridge over T'Beck in floodtime. Cannan visited the valley again in 1913, 1914, and 1916, when he took his family there and they climbed some of the 'recognised' things—generally with Messrs. Field and Bowen. I was there with them in 1914.

The first year I went to the Alps with Cannan was 1889. We walked through the Kienthal (not then a popular resort) to Kandersteg, *en route* for Ried. Cannan refused to walk over the Lötschenpass, and said I must find something else. I found him the Märwiglücke in Tschudi; and perhaps we went by that: I say perhaps, because I do not know (see 'A.J.' 'Alpine Notes,' Nov. 1889). Anyhow, we arrived at Ried, and went up the Bietschhorn. Thence we crossed the Beichgrat (small peak improbably alleged to be 'new,' *en route*) to Belalp, whence Cannan went on to Dauphiné with Mr. T. P. H. Jose and Joseph Truffer. I met him again in '91, at Zinal. We crossed the Triftjoch to Zermatt, and came back to Zinal (weather being bad for climbing) *via* the Jung and Meiden passes. There

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was also a peak (new ?) at Zinal, Point 3176, near the Pigne de l'Allée. Thirteen years afterwards, I was at Stein with Cannan and Mrs. Cannan, in a partially constructed hotel; luckily the weather was fine. He and I went up two or three small peaks there. Thence we moved to the top of the Simplon, and went up Monte Leone. In 1906, my wife and I joined the Cannans at the Montanvert, and I went up the Petits Charmoz with him, and the Aiguille du Tacul: in the same year, the Diablerets and Oldenhorn. The last climb I had in his company (in the Alps) was in 1911, a small and incomplete expedition from Belalp; but from 1910 onwards he began to introduce his daughters to the mountains, and he and they did a great deal of climbing in 1910 (Stein and Göschenen), 1911 (Zermatt and Belalp), 1912 (Stein and Maderanerthal), 1913 (Arolla), July 1914 (Savoy). I find no record of any Tyrolese climb, except Cristallo in 1908.

Keenly interested in everything pertaining to the art and practice of mountain-climbing, quick to learn, and never in any sphere satisfied with anything short of a thorough mastery of the subject in hand, Cannan had made himself, when I first went with him, an extremely competent all-round mountaineer. Snow and ice-craft most interested him, from the variety of its problems and the opportunities given for skill based on knowledge and practice. Every ascent gave him experience, which he did not forget. Physically, he was very well equipped. Alpine climbing in the 'eighties and early 'nineties often meant very long walks—much longer than are nowadays necessary—and Cannan must have been in his younger days a very strong walker. I believe he ascended the Matterhorn from Zermatt direct, not from the Schwarzsee or the hut. But his great possession was knowledge. He went always with guides, liking their society and learning from them. But he could lead, as we knew at Wastdale Head. In the afore-mentioned passage of the Märwiglücke (?) he went first, by the expressed wish of the two Kandersteg guides who accompanied us; and the route was known to none of the party.

Always and everywhere, whether in the Alps or away from them, Cannan had an abiding enthusiasm for mountaineering. It was not always shown in conventional ways. A deep sense of the seriousness of climbing as a temporary vocation found expression mostly in trenchant and sometimes damnatory phrases. But it was there. Many have the enthusiasm; not many have Cannan's power of communicating it to others. It was one of his great characteristics that, whatever the business in hand, he could inspire collaborators with something of his own energy and his own method; and you could not climb with him without being made to feel that you were doing something worth the best human effort. It was by virtue of that—by handing on the torch—that Cannan did notable service to mountaineering and the Alpine Club.

A. D. G.

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WALTER LARDEN (1855–1919).

We have to record the death of this well-known climber on October 7, 1919, at a nursing home near Vevey. It was characteristic of Larden's strenuous, determined nature that he should obey a call to serve his country, regardless of his own comfort and interests. The call duly came and in spite of his advanced age of sixty-two he clad himself in khaki, associated with men of uncongenial tastes and habits, and lived a physically severe life under canvas on the East Coast for three months in 1918. There can be little doubt that this life of hardship, relieved by little that appealed to his refined, sensitive nature and high character, seriously undermined his health and strength, which for several years had been far from vigorous and sound.

There is no need here to recount in detail Larden's mountain exploits, which extended from 1880 until near the outbreak of the War. These are graphically and interestingly recorded in his two books, 'Recollections of an Old Mountaineer'[1] and 'Argentine Plains and Andine Glaciers.'[2] Since the outbreak of the War, Larden visited the Lake District and North Wales; and last summer, in broken health, he made an attempt to climb from Binn and Arolla. He actually succeeded in reaching the Geispad Pass, and the Bertol hut, and in gaining the Roussette, and the Pigne d'Arolla; but from the middle of August could do no more. Thereafter he gradually sank away and was unable to return to England, whither he was advised to go.

Arolla was one of Larden's favourite haunts, and his fame as a mountaineer early and deservedly spread in mountain circles, as a result of the 'Guide' to the walks and climbs in the neighbourhood, which he drew up so carefully and exhaustively at the Hôtel Mont Colon. Every expedition, route, and variation, narrated in the visitors' book, as well as obtained from other sources and from his own experiences, were all described in orderly sequence and minute detail, and as a consequence his name became one of renown to many a lover of Alpine snows.[3]

The thought, care and thoroughness which Larden threw into this work were characteristic of him in each of his pursuits. When climbing he went about the business with critical intelligence and dogged determination. But although persistent in accomplishing his end, he was by no means rashly inclined. Quite the contrary. He was ever alertly critical, cautious and judicious, as to what was

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[1] Edward Arnold, 41 and 43 Maddox Street, Bond Street, London. 1910.

[2] T. Fisher Unwin, Adelphi Terrace, London. 1911.

[3] This guide was published in book form in 1908 by S. Chick & Co., 48 Wells Street, Oxford Street, London.

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feasible, and what had better not be attempted. He aimed, naturally, at big expeditions with guides, in preference to smaller ones without, and, to prove that his was no sheep-like following, he found pleasure in repeating such expeditions without guides, and thus cultivated the self-reliant instinct which was so markedly developed in him.

That Larden profoundly enjoyed mountaineering and ungrudgingly devoted a considerable proportion of his somewhat slender income to his holidays and guides, there can be no manner of doubt, but it was always very serious enjoyment. His appreciation of views, flowers, and sunshine, and, above all, of the pervading spirit of the mountains, was deep and intense, but he rarely gave expression to such feelings, even to his immediate companions. He seemed to subordinate them to a critical analysis of the topography of the scene, or to recollections of similar experiences.

Larden always regarded as his life's work the seventeen years he was Instructor at the Naval Engineering College at Devonport. Here, with characteristic self-abnegation, he devoted himself wholeheartedly to helping on the less intelligent among the cadets. The previous eight years, spent as Science Master at Cheltenham College, he considered unproductive and unsatisfactory as compared with the steady development of teaching which he was able to achieve, later on, at Devonport.

Next to his work and his Alpine exploits, his principal interest was in literature, especially poetry. He constantly read Shakespeare during his solitary meals, and was a great admirer of Tennyson. He taught himself French, Spanish, and German, and became so well versed in classical 'Middle High German' as to be almost an authority on the subject. In art he had a correct and discriminating taste; in music he had a good idea of counterpoint, and as a young man had a fine baritone voice, which, however, he completely ruined by overstrain in teaching. He found consolation in whistling airs of old English and German folk-songs to the accompaniment of a guitar, which he played with considerable skill.

Photography was a comparatively recently acquired pursuit, and, as with everything else, he gave it intent attention, and mastered the art very successfully. His unique conception of collecting, tabulating, and photographing the inscriptions on chalets, which culminated in his book on the subject,[4] took form and was largely carried out during one or more of his, latterly, periodic nervous breakdowns. He must ever be doing or planning something, even when physically unfit and weary and unable to follow his more active occupations.

Rifle shooting he likewise took up in middle life on the principle

[4] *Transcriptions from Swiss Chalets*, by Walter Larden, M.A. 1913. Horace Hart. University Press, Oxford.

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that every citizen should be able to serve his country, and the War found him, not only an efficient instructor of younger men, but the most expert marksman of his corps and district. His favourite exercise (in England) was rowing, and in Plymouth Sound he used to amaze the crews of the warships by sculling down the harbour, and outside the breakwater, in a light outrigged river-skiff in distinctly rough weather. Yet here again he always exercised that extreme care and caution, combined with progressive perseverance, which enabled him to do apparently the most daring things without incurring (for him) undue risks.

The most outstanding feature of his character was the consistent and unselfish devotion to duty, which he carried into every branch of his activities. Handicapped by chronic ill-health, and pathetically conscious of his lone circumstances, his high courage, his affection for small children, his unreserved and confiding nature, and his animated conversational powers, won him the warm friendship of a modest circle which was only restricted by his instinctively retiring nature. Among these, and especially among those of the Alpine Club, his loss will be keenly felt, and his memory affectionately cherished.

LEGH S. POWELL.
HENRY W. KITCHING.

CANON ARTHUR SLOMAN.

(1851–1919.)

CANON SLOMAN attended the Winter Dinner, apparently in good health, and was the object of some very sympathetic remarks by his former pupil, the Lord Chancellor. A few days later he passed quietly away.

Mr. C. E. Freeman writes to the Rev. Canon J. E. Dawson :—

'My knowledge is limited to his early years, 1877–1882. Circumstances prevented us from going together in 1883, and he married in 1884.

'He did a good deal at Cortina in 1883. In later years he was often at Arolla. I used to hear from him about his doings, but I have no record. He climbed most things there, Mt. Collon, the Za, the Pigne, &c.

'I will give a short account of the climbs in which I was his companion.

'1877. We went to Switzerland without any idea of climbing, but at the end of August were bitten with the idea, and determined to do something before we returned. When I asked him what it was to be, he replied that as Monte Rosa was the highest available peak, we had better go for that. We got up, a fact

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probably owing to the enthusiasm of a first attempt, for the weather was atrocious, and the three other parties from the Riffel turned back. We floundered down, up to our waists in snow.

'1878. Walked to Chamonix, crossed the Cols du Géant and de Valpelline, and went up Gabelhorn and Rothhorn.

'1879. We only had ten days. We crossed the Trift to Zermatt, did the Strahlhorn, crossed the Théodule to Breuil, and thence next day came over the Matterhorn, not going to the Italian hut, but sleeping on our descent at the old hut on the Zermatt side. As we left next morning, we met Moseley and his party. [Moseley was killed a few hours later. Had Canon Sloman's party visited the Italian hut, they would have found there the guide Brantschen, who had been left there, ill, by his party, and died before succour reached him. An Italian party, of which Daniel Maquignaz was a member, it being his first ascent of the Cervin, found Brantschen dead on the floor of the cabane.] An attempt on Weisshorn defeated by weather.

'1880. At Grindelwald. Wetterhorn, Eiger, Mönch, Jungfrau.

'1881. Crossed the Moming and the Alphubel Joch. We had bad luck.

'1882. Finsteraarhorn and Jungfrau from Concordia, Nadelhorn from Saas Fee. The Mischabeljoch to Zermatt, Dom and Weisshorn.

'This is the whole of the record. It cannot be called adventurous, but it brings back to me memories that are among the most delightful that I have, partly, I suppose, because I was then young, partly, and especially, because Arthur Sloman was a perfect companion, always considerate and unselfish, eager for success and full of enthusiasm, but wholly undisturbed by annoyances and disappointments.'

Mr. Solly writes:—

'I first met Canon Sloman about 1885. He seconded me for the Club just thirty years ago, and during that time I have had no more valued friend. After 1885 he stopped serious climbing for about twenty years, mainly, I understand, from family reasons, but he then resumed, and almost every year until 1914 made a number of expeditions, principally from Arolla or Saas, and he was able to find a few new climbs even in those districts, such as the traverse of the Vuibez Rocks' ('A.J.' xxv. p. 742, and see the 'Record of Expeditions in 1911' in 'A.J.' xxvi.). 'I did several climbs with him in 1907 and 1908, including an ascent of Mt. Collon and traverse of the Sonnighorn, and the Petite Dent de Veisivi, and he showed that he could still climb as well as many younger men, and that his love of the mountains had deepened rather than decreased with the lapse of years.

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'He was more than a mere mountaineer—a fine scholar and conscientious parish clergyman.'

In 1908 Canon Sloman ascended the Weissmies with his son and his old and respected guide, Ambros Supersax.

In 1910 he visited the Oetzthal.

HENRY MARTIN.

On Sunday, July 27, at Vevey, on the Lake of Geneva, died Henry Martin. An ardent lover of the mountains, a safe climber, a delightful companion, a true friend.

The writer met him for the first time at the Riffelalp in 1898, and since that time, for the next ten years or so, made with him and E. A. Aldridge many expeditions and climbs in Switzerland, Italy, the Dolomites, and spent an Easter at Wastdale Head.

Martin began serious climbing comparatively late in life, and was 52 years of age when he became a Member of the Club. Before that time he had done a good deal of walking over passes in Switzerland and Italy with the late Canon Beaumont and Mr. F. Ball.

When nearer 60 than 50 he did such climbs as the Weisshorn, the traverse of the Rothhorn, the Aiguille de la Za by the steep west face.

Memory recalls many delightful holidays spent together with him and Aldridge. Martin, I think, always arranged the plan of campaign, and no man could do so better.

He often spent part of his holidays at Belalp, and I think always a part at the Riffelalp, when, in latter times, and not up to severe expeditions, he delighted to organise and lead parties through the ice-falls of the Gorner and Findelen glaciers and up the Riffelhorn.

He was a most genial companion, always unruffled, cheery, good-tempered, whatever befell; he will be greatly missed by a large circle of friends.

Canon Martin was born in 1844. He was educated at the Merchant Taylors' School and St. Edmund's Hall, Oxford, where he graduated with honours in Theology in 1872.

His great life's work was as Principal of Winchester Diocesan Training College, which post he held for 34 years.

Canon Martin's personality endeared him to the hearts of his staff and students alike, and engendered an *esprit de corps* which was not the least glory of the institution.

It has been well said that Canon Martin's success in his work lay chiefly in his strength of character and his tact, and under his guidance the Winchester Diocesan Training College held a distinguished place in the educational world.

He was a man of many interests and activities—for some years a Governor of the Royal Hampshire County Hospital, Hon.

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Treasurer of Connaught House, Member of the Winchester Deanery Committee of the Diocesan Conference, Chairman of the Winchester Branch of the R.S.P.C.A., Director of the Hampshire and General Friendly Society, Member of the Winchester Diocesan Board of Education, Member of the Executive Committee of the S.P.G.

He took the greatest interest in the Training College Company of the old Volunteers, subsequently the Territorial Battalion of the Hampshire Regiment. He rose to the rank of Hon. Lt.-Colonel of the 1st V. B. Hampshire Regiment, and retired with the Volunteer Decoration.

Canon Martin was twice married, and he leaves a widow and two children by his second marriage.

Latterly he had to relax his activities owing to a weakness of the heart. The end came very suddenly, and I think as he would have wished.

He had left England, with Mrs. Martin and their two children, for Switzerland, arriving at Vevey on July 20. Just a week later (on Sunday, July 27), he went with Mrs. Martin to the 8 o'clock service at the English Church, and there in church, during the service, he passed away.

G. W. Lloyd.

THE ALPINE CLUB LIBRARY.

The following works have been added to the Library:

Club Publications.

Akadem. Alpenclub Freiburg, Switzerland, 1913. Statuten. 1919
$7\frac{1}{2} \times 5$: pp. 4.

Akad. Alpen-Club Zürich. XXIII. Jahresbericht, 1918. 1919
$9 \times 5\frac{3}{4}$: pp. 30: 77: 18: portraits, maps, ill.
Neue Touren: *M. Kurz,* Kühbodenhorn N.W. Grat: Hint. Muttenhorn N.E.-Grat: Passo di Pesciora: Wyttenwasserstock N.W.-Grat: Saashorn v. N.: P. Rotondo v. N.: Eggstock O.-Grat: Rhonejoch: Dammazwillinge: *E. Aemmer,* Weitenalpstock O.-Grat: Kammlistock N.-Wand: *C. Egger,* Kurmütschi, Caucasus, 1914.
The chief article is: Beiträge zur topographischen Erschliessung der Cordilleras de los Andes zwischen Aconcagua und Tupungato. Von Dr. Robert Helbling. Mit Anhang, Die Höhe des Aconcagua.

American Alpine Club. Report of the Annual Meeting, January 8. 1916
$8\frac{3}{4} \times 6$: pp. 20.

—— By-Laws and Register, 1919.
$6\frac{1}{2} \times 4$: pp. 115.
Contains: Book-plate of A.A.C.: By-Laws, 1916: Sketch of History of Club: Reports of Meetings, 1914–18, with notes on first ascent of Mt Edith Cavell by Dr. Gilmour and Prof. Holway: of Mt Coropuna in 1911 by Prof. H. Bingham: of Mts Dorland and Fox by new routes by Mr. Palmer: List of members (99) with their ascents.

—— Slip for recording ascent. 1919

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Appalachian Mountain Club. Appalachia, vol. 14, nos. 1–4. 1916–1919
9½ × 6: pp. vi, 448: plates.
Among the articles in this are:—
A. H. Bent, Mountaineering Clubs of America: The Literature of Mountain Climbing in America: *H. L. Emerson,* Rock climb in Southern New Hampshire: *E. Harrington,* A code for signal calls: *L. Jeffers:* John Muir, an appreciation: *M. L. Jobe,* A winter journey through the Canadian Rockies: *W. E. Stone,* Climbs and explorations in the Purcell Range in 1915 and 1916.

—— Bulletin, vol. 12. 1918–1919
7¼ × 4¾: pp. 176.

Associated Mountaineering Clubs of North America. Bulletin.
6 × 3½: pp. 16: 30. May 1916: May 1919

C.A.F. La Montagne. Revue mensuelle. 15e année. 1919
9 × 6: pp. xii, 300: ill.
Among the articles are:—
R. Touchon, Tête des Faux: *Raysse,* Le Mont Valier en Ariège: *H. Cuënot,* En Alsace: *L. Vernaud,* 1918, Le Moine, Col du Géant, Aig. du Géant, Dent du Requin, Grands Charmoz, Aig. du Grepon, Mont Blanc, Les Drus: *C. A. Grande,* Picos de Europa: *F. Schrader,* Carte de Gavarnie et du Mont Perdu: *V. de Cessole,* La Tête des Cibiroles et l'Aig. Foch, premières ascensions: *F. Schrader,* Pointe Garibaldi: *P. Lory,* L'Obiou par le Nord Ouest: *R. Puiseux,* Valsavaranche: *P. Labrouche,* Picos de Europa, Premières ascensions 1919: *P. Lory,* Col du Milieu: *P. Chevalier,* Gendarme Wehrlin (Aigs. Rouges): *M. et A. Damesne,* Aig. du Pouce sud face: Aig. de la Tête Plate arête ouest: Trident du Mont Blanc du Tacul: Aig. du Lac Blanc arête est: *M. Godefroy,* Aig. de la Gde Sassière sud face.

—— Congrès en Alsace et en Lorraine, 8–16 Sept. 1919
10½ × 8½: pp. 4.

C.A.I. Rivista mensile, vol. 36–37. 1917–1918
9½ × 6½: pp. 256: 192: maps, ill.
Among the articles are:—
1917. *A. Ferrari,* Corno dei Tre Signori, P. di Gavia: Ortler-Cevedale: *R. Gerla,* Il Gruppo del Krn: *A. Paini,* Val di Daone e di Fumo: *W. A. B. Coolidge,* La storia dei tre Weissthor: *D. Prina,* Le Alpi Giulie: *F. Grottanelli,* Nel' Alta Val Susa: Alcune piante alpine rare del Piemonte.
1918. *R. Calegari,* Mte Disgrazia d. versant nord: *N. Borelli,* Una nuova via d'ascensione al Mte Vélan: *A. Cusini,* Dent du Requin: *W. A. B. Coolidge,* La storia del Col di Tenda (from Engl. Hist. Rev. 1916): *A. Corti,* P. Bernina per il canalone merid. d. Forcola Scerscen-Bernina: *M. Boccholi,* Il Lyskam in inverno.
New Expeditions, vol. 36. *G. A. De Petro,* La Bessanese Cresta Rey: *Abbate Henry,* Rocher de la Division, Rocher Silvano, Fenêtre du Mt Percé.
Vol. 37. *S. Noci,* Torre d. Gran S. Pietro: *Abbate Henry,* Gendarme de Chermontane, Becca Bovard, Tête de Chavacour, Becca des Crottes: *F. Berthelet,* Pta Gastaldi parete orientale: *G. A. De Petro,* Corno meridionale: *P. Viglino,* Blanc Giuir.

—— 43° Congresso degli Alpinisti Italiani (Trentino ecc.), 13–21 Sett. 1919
9 × 5: pp. 8.

—— **Gruppo Studentesco S.A.R.I.** Itinerari alpini, I. Serie Valli di Lanzo. Dal Rifugio Peraciaval. 1919
6½ × 4¾: pp. 19: ill.

Canadian Alpine Journal. Vol. 10. 1919
9 × 6: pp. 120: plates.
Articles:—*V. A. Fynn,* Around Lake Louise in 1918: *H. E. Bulyea,*

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A trip to Mount Robson: *R. Douglas*, Notes on mountain nomenclature: *H. B. Sanson*, Snow in the Rocky Mountains Park: *W. Spreadborough*, Animals and birds of the Canadian Rockies: *R. M.*, Mammals of Jasper Park.

Fell and Rock Climbing Club Journal. Vols. 3–4, nos. 7–12. 1913–1918
8½ × 5½: pp. xvii, 403: plates: pp. viii, 282: plates.
Among the articles are:—
No. 7. *H. P. Cain*, Buttermere climbs: *J. R. Thackrah*, Pyrenees: *S. W. Herford*, Vajolet Towers: *J. Laycock*, Doe Crag: *G. F. Woodhouse*, New Climbs—Napes, Eel Crag Gully: *W. F. Ascroft*, Wellenkuppe: Climbs old and new.
No. 8. *W. P. Haskett-Smith*, First ascent of Napes Needle: *G. S. Sansom*, Scafell Central Buttress: *H. B. Lyon*, Gillercombe Buttress: *R. Mayson*, Troutdale Pinnacle, Borrowdale.
No. 9. *A. E. Field*, Tour in the Dolomites: *J. J. Brigg*, Alps of France: *H. Raeburn*, The Caucasus: *W. Weston*, Two climbs in the Japanese Alps: *J. E. Marr*, Up Church Beck, Coniston.
No. 10. *J. P. Rogers*, Boulder Valley.
No. 11. *R. E. W. Pritchard*, Wastdale Head climbs: *J. W. Robinson*, Amongst the crags in 1885: *B. Martin*, New climbs on Dow Crags: In memoriam, H. L. Slingsby.
No. 12. *G. D. Abraham*, Recollections of E. Whymper: *W. P. Haskett-Smith*, Pyrenean personalities, M. Byles, C. Packe: *G. S. Bower*, Easter on Lliwedd: Climbs new and old.

Ladies' Alpine Club. Calendar 1920.
4¾ × 3¾: pp. 12: 3 plates.

Mountain Club of South Africa. Annual, no. 22. 1919
9¾ × 6: pp. 92: plates.
This contains:—*J. W. Fraser*, New peaks and old, Buffels Hoek: *K. H. Barnard*, The Zonder Einde Mountains: *G. F. Travers-Jackson*, Traverse of the Buffels Hoek Peak and Twins to Ceres: *S. H. Haughton*, To the top of Snowdon, Cape Colony.
There is also an Index to original articles in vols. 1–20.

Mountaineers. The Mountaineer, vol. 11. Monte Cristo District.
10½ × 7: pp. 97: plates. Seattle, 1919
—— Prospectus number Mountaineer Bulletin. Ninety miles around Rainier. 1919
9½ × 6: pp. 14.
—— Activities of Mountaineers. 1919
5¾ × 3¾: pp. 11.

Nederl. Alpen-Vereeniging. Kalender 1920. Onder redactie van Jenny Visser-Hooft, Ph. C. Visser. Rotterdam, Nijgh & v. Ditmar, 1920
10 × 6½: pp. 53: plates.

Pietermaritzburg Mountain Club. Proposal to form, 15 April 1919. In *Times of Natal*, April 16, 1919.

S.A.C. Echo des Alpes. 55me année. 1919
9 × 5½: pp. 244: ill.
Among the articles are:—
L. Seylaz, Une arête des alpes vaudoises: *A. Lunn*, Une expédition en ski au mois de mai: *A. Baechtold*, L'arête des quatre ânes: *C. Henri*, Course à la Cime de l'est: *C. Täuber*, La Rosa-Blanche: *F. Montandon*, Une première en terre vaudoise: *F. Lombard*, Ascension au Mont-Blanc en 1865: *M. Kurz*, Corniches de neige et leur formation: *M. Conway*, L'alpinisme britannique.

—— **Weissenstein.** Bericht, 1914–1918. 28.–32. Vereinsjahr. 1919
6 × 9: pp. 62.
Article:—A. Walker, Auf den Kilchlistock.

—— **Jahrbuch:** 53. Jahrg. Bern, 1919
10 × 7½: pp. viii, 336: plates.
Contains: *O. Frohnmeyer*, Kreuz u. quer durch Nordgraubünden:

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F. Bühler-Rist, Traversierung des Grosslitzner-Grosses Seehorn: *H. Müller,* Aus d. Urner Alpen: *O. Gurtner,* Die Gspaltenhorngruppe: *J. Bernet,* Le Ginanzthal: *W. Mittelholzer,* Ein Flug, ü. d. Berner u. Walliser Alpen: *H. Correvon,* La Vallée de Poschiavo: *A. Heim,* Das Gewicht der Berge: *P. L. Mercanton,* Les variations périodiques des glaciers d. Alpes suisses: *A. Ludwig,* Ueber Talbildung in d. Alpen u. im Vorlande: *Thomas,* L'enquête sur le mal de montagne: *K. Gabriel,* Beiträge z. Graubündnerführer.

Neue Bergfahrten: *M. Borelli,* Mt Vélan SO.-Wand: Allalinhorn NO.-Grat: *F. Rupp,* Rosenlauistock W.-Flanke: *O. A. Hug,* Galenstock W.-Grat: *M. Kurz,* Schneestock v. O.: *A. Scabell,* Punta Nera: *G. Miescher,* Pucher N.-Wand: *M. Kurz,* Schneehühnerstock S.-Grat: *E. Hauser,* Böser Faulen N.-Grat: *M. Lusy,* P. Bernina O.-Grat.

Ski. Jahrbuch des Schweiz. Ski-Verbandes. XIV. Jahrgang.
$8\frac{3}{4} \times 5\frac{1}{2}$: pp. 144: ill. Bern, 1919
Among the articles are:
R. Billwiller, VI. Bericht der Gletscherkommission d. Physik. Ges. Zürich: *M. Kurz,* Wie lisst der alpine Skiläufer seine Karte? *C. J. Luther,* Schweiz. Schneemaler: Hans Beatus Wieland: *F. Brun,* Skitouren im Bedrettotal: *A. Lunn,* Frühlings- und Sommerskifahrten: *W. Waller,* Ostertouren im Kaiserstockgebiet.

Soc. Alpina d. Giulie. Alpi Giulie. Marzo 1915—Maggio 1919
$10 \times 6\frac{3}{4}$: pp. 20.

Svenska Turistfor. Årsskrift. 1919
$8\frac{1}{4} \times 5\frac{1}{2}$: pp. 341: plates.
Contains among other articles:
H. Kjellman, En äventyrlig tur till Vassitjåkko.
A. Berman, Ett intressant fjällmassiv i Jämtlanfjdsällen.

Yorkshire Ramblers' Club. Annual Report, 1918–19. List of Members, Library Catalogue. 1920
$8\frac{1}{2} \times 5\frac{1}{2}$: pp. 17.

New Works.

Belden, Charles J. The Tioga road across the Sierra Nevada. In Geogr. Rev. New York, vol. 7, no. 6. June 1919
$10 \times 6\frac{3}{4}$: pp. 377–386.

Bent, Allen A. The unexplored mountains of North America. In Geogr. Rev. New York, vol. 7, no. 6. June 1919
$10 \times 6\frac{3}{4}$: pp. 403–412.

Brigham, Albert Perry. Principles in the determination of boundaries. In Geogr. Rev. New York, vol. 7, no. 4. April 1919
10×7: pp. 201–219.
Includes consideration of the Alps and the Pyrenees.

Brunies, S. Bilder aus dem schweizerischen National-park und seiner Umgebung. Basel, Schwabe, 1919
$9\frac{1}{2} \times 7$: pp. 29: 64 plates.

Camsell, Charles and Malcolm, Wyatt. The Mackenzie River Basin. Canada, Depart. Mines, Geol. Surv. Mem. 108, no. 92, Geol. Ser. Ottawa, 1919
$9\frac{3}{4} \times 6\frac{1}{2}$: pp. 154: plates.

Casella, Georges. Les deux routes. Roman. Paris, Flammarion (1919)
$7\frac{1}{4} \times 4\frac{3}{4}$: pp. 25.
A good novel of climbing on the Mont Blanc range.

Colorado. Come up to Colorado. Denver, Tourist Bureau [?1919]
$8\frac{1}{2} \times 7\frac{3}{4}$: pp. 30: col. ill.

Eberli, Henry. An English mountaineer, A. W. Moore. Reprinted from Whitby Gazette, Sept. 5, 12, 19, 26. 1919
$6\frac{1}{2} \times 4$: pp. 40.

Enock, C. Reginald. The great Pacific Coast. Twelve thousand miles in the golden west, being an account of life and travel in the western States

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of North and South America, from California, British Columbia, and Alaska. . . . London, Richards, 1919
9 × 5½ : pp. xi, 356 : plates : map.

Ferrand, H. L'alpinismo. In La Sorgente, Riv. mensile, Milano, anno 3, ni. 4–5. 15 aprile, 15 maggio 1919
9¾ × 6¾ : pp. 102–5 : 147–150 : ill.

—— Le Buet. In Rev. mens. du T.C. de France, t. 29. Juillet 1919
10¼ × 8¼ : pp. 168–175 : ill.

—— Pitschner et Mont Blanc. Le Mont Wilson. In La République de l'Isère, Grenoble. 27 Oct. 1919

Fisher, Lawrence C. Snowfall on Mount Rainier. In Monthly Weather Rev., U.S. Depart. of Agric. Weather Bur., vol. 46. July 1919
12 × 9½ : pp. 327–330 : plates.

Frei, Hermann. Davoser Skitouren. Illustrierter Führer.
7¾ × 5¼ : pp. 116 : plates. Davos, Ski-Club, 1919

Geographical Journal, vol. 54. July–December 1919
9¾ × 6 : pp. viii, 408 : maps, ill.
Among the articles are the following :
October. F. K. Ward, Possible prolongation of the Himalayan axis beyond the Dihang.
November. The new boundaries of Austria.
December. K. Mason, Central Kurdistan.

v. Grabmayr, Karl. Hsg. v. Süd-Tirol Land und Leute vom Brenner bis zur Alurener Klause. Berlin etc., Ullstein, 1919
6½ × 4 : pp. 255.
Articles by various writers who were against the northern portion of Italia irredenta having been given to Italy.

Harshberger, John W. Alpine fell-fields of eastern North America. In Geogr. Rev. New York, vol. 7, no. 4. April 1919
10 × 7 : pp. 233–255.
A fell-field is a rocky flat on the alpine summits of mountains.

Jaccotet, G., etc. Au Soleil et sur les Monts. L'étape libératrice : Scènes de la vie des soldats alliés internés en Suisse. Genève, Sadag, 1918
12¼ × 9 : pp. 289 : plates.

Jeffers, Le Roy. Mountaineering in the Sierra Nevada. In Scribner's Mag. New York, vol. 65, no. 6. June 1919
9½ × 6½ : pp. 645–664 : plates.
Kindly presented by the Author.

—— Mountaineering in the great Canadian Rockies. In Motor Life, New York.
13 × 10 : pp. 40–41, 106 : ill. June 1919
Kindly presented by the Author.

Jegerlehner, Johannes. La route du Loetschberg. Illustrations de Fred. Boissonnas. Genève, Sadag [? 1918]
13 × 10 : pp. 178 : plates.

Miller, Leo E. In the wilds of South America : Six years of exploration in Colombia, Venezuela, British Guiana, Peru, Bolivia, Argentina, Paraguay, and Brazil. New York, Scribner, 1919. $4.50
9 × 6 : pp. xiv, 428 : map, plates.
Records of expeditions for investigation of fauna and flora : and for the study of the various peoples in the districts. The Andes were crossed at several places. The following legend is interesting : 'Huana Potosi has a flat top. When the world was young, vapors enveloped all the earth ; suddenly the sun-god appeared and, beaming down from heaven, caused the mists to become dissipated and vanish. Illimani awoke to life and from his dizzy height beheld the queenly Huana Potosi smiling up at him. At the same time, however, Murarata emerged from the clouds and, beholding the beautiful Huana Potosi, fell violently in love with her. Illimani became insanely jealous, and in a blind fury hurled forth fire, smoke, and stones at his rival's head ; the latter promptly replied in kind. . . .

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After a seemingly endless time, the combat stopped; daylight returned, revealing an appalling state of affairs. Finding it impossible to vanquish the rival suitor, Illimani had beheaded his fair ladylove to prevent her from falling into the other's hands. The many streams of water rushing down the steep sides of Illimani are but the tears of grief and remorse over his hasty action.'

Montana. In Senior Officers' Club Year Book, 1919–20.
7¼ × 5: pp. 49–63: ill. London, Hazell, Watson, 1919

Mougin, P. Avalanches dans le Vivarais. In La Géographie, Paris, t. 32, no. 2. 1918
10 × 7¼: pp. 102–103.

Muir, John. Steep trails. Edited by William Frederick Bade.
Boston and New York, Houghton, Mifflin (1918). $3
8 × 5½: pp. xi, 391: plates.
This contains the following interesting reprints from San Francisco Evening Bulletin, Picturesque California, Overland Monthly, etc.:
Wild Wool: A geologist's winter walk: Summer days at Mount Shasta: A perilous night on Shasta's summit: Shasta rambles and memories: The City of the Saints: The San Gabriel Mountains: Glacial phenomena in Nevada: The forests of Washington: Ascent of Mount Rainier: Rivers of Oregon: Grand Canyon: etc.

New Zealand. Tourist and Health Resorts Department: Report. 1919
'Hermitage. High ascents were quite out of the question in the early part of the season, and a number of climbers went away disappointed. The bad weather continued on through the season till the beginning of February. Six weeks of fine summer weather followed, and when the mountains were in climbing condition, with the exception of Mr. S. Turner, there were no other climbers wishing to make high ascents, so the guides' department suffered considerably. . . . The heavy snowstorms of last winter did serious damage to the King Memorial Hut and the Sefton bivouac, the heavy weight of snow crushing in the roof, breaking many of the rafters and stays. . . . The chamois and thar liberated on the reserve have been seen several times during the summer. . . . The chief climb during the season was the solitary ascent of Mount Cook by Mr. S. Turner. He is the first unaided amateur to make the ascent. . . . Ascents were made on Hochstetter Dome, Mount Kitchener, Mount Annette, Mount Wakefield, Barron's Saddle etc.'

Portier, Francis. Grimentz Village Valaisan. Texte de Léon Dunand. 10 planches fac-similés des peintures de Francis Portier.
11 × 14: pp. 4: col. plates: 6½ × 8½. Genève, Sadag, 1919

Rabot, Ch. Observations glaciaires dans les Alpes en 1916 et 1917. In La Géographie, Paris, t. 32, no. 1. 1918
11 × 7¼: pp. 20–23.

—— Les variations des surfaces boisées dans les Alpes du Dauphiné pendant les deux derniers siècles. In La Géographie, Paris, vol. 32, no. 1. 1918
10 × 7¼: pp. 23–26.
The forests appear to have been considerably increased in area, and the theory that severe floods were largely due to deforestation would appear to be untenable.

—— La neige dans les Alpes françaises. In La Géographie, Paris, t. 32, no. 3.
11 × 7¼: pp. 183–187. 1918

Ramuz, C. F., et Bille, Edm. Le village dans la montagne.
14 × 10½: pp. 260: col. and other plates. Lausanne, Payot, 1918

Rey, Guido. Alpinisme acrobatique. Traduit de l'italien par Emile Gaillard.
8¼ × 6: pp. xvi, 336: plates. Chambéry, Dardel, 1919

Rinehart, Mary Roberts. Tenting to-night. A Chronicle of Sport and Adventure in Glacier Park and the Cascade Mountains.
Boston and New York, Houghton, Mifflin, 1918
8 × 5¼: pp. ix, 188: plates.
An interesting account of one of the great mountain parks of the United States, with excellent clear pictures of the scenery.

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Rocky Mountain National Park, Panoramic view. U.S. Depart. of Interior. 17½ × 14 : map. 1919

Roget, F. F. Altitude and health. London, Constable, 1919
8¾ × 5½ : pp. xii, 186.
A volume containing a course of Chadwick lectures for 1914, brought up to date. The contents are : Latitude versus altitude : helpfulness of moderate cold : oxygen, ozone, dust ; characteristics of alpine climate : muscular effort in reaching altitude : experiments on blood : mountain sickness due to exertion rather than to altitude : monks on Gt. St. Bernard : statistics : alpine treatment of war patients : etc.

Royal Geogr. Soc. Recent Geographical Literature etc., no. 3. Supplement to the Geogr. Journ. June 1919
9¾ × 6 : pp. 100.

Rytz, W. Die Erforschung der Alpenflora und der Alpinismus in der Schweiz. Nach einem Vortrag gehalten in der Sektion Bern des S.A.C.
9 × 6 : pp. 32. Bern, Schw. Alp. Museum, 1918

La Sorgente. Rivista mensile per l'educazione della gioventù Organo d. Comitato naz. d. T.C.I. Anno 3, ni. 3–4. 15 aprile, 15 maggio 1919
9¾ × 6¾ : pp. 95–156 : ill.

Stucki, G. Schülerbüchlein für den Unterricht der Schweizer-Geographie. vii. Aufl. Zürich, Orell Füssli, 1919. Fr. 4
8 × 5¼ : pp. ix, 137 : ill.

Toll, Roger W., and Yard, Robert Sterling. Mountaineering in the Rocky Mountains National Park. Compiled from the records of the Colorado Mountain Club. U.S. Depart. Interior.
Washington, Governm. Printing Office, 1919
9 × 6 : pp. 106 : map, plates.

Turner, Samuel. Alone on Mount Cook. In The Dominion, Wellington, N.Z., p. 7. 14 March 1919

United States Railroad Administration. 1919
Colorado. 9½ × 6½ : pp. 24 : ill.
Pacific Northwest and Alaska. 9 × 8 : pp. 60 : ill.
California for the tourist. 9 × 8 : pp. 60 : ill.
Colorado and the Utah Rockies. 9 × 8 : pp. 62 : ill.
Mount Rainier National Park. 9½ × 6½ : pp. 23 : ill.
Zion National Monument, Utah. 9½ × 6½ : pp. 15 : ill.
Grand Canyon National Park, Arizona. 9½ × 6½ : pp. 31 : ill.

Older Works.

Buchan, John. Prester John. London, etc., Nelson, 1910
7 × 4¾ : pp. vi, 376.

Carballo, J. M. Excursion geologica a Picos de Europa. In Bol. real Soc. españ. de hist. nat., t. 11, num. 5. Madrid, Mayo 1911
10 × 6½ : pp. 216–225.

Carey, David. Picturesque scenes ; or, a guide to the beauties of the highlands . . . and other poems. 2nd edition. London, Printed for the author, 1812
9 × 5½ : pp. 225.

Chapman, Abel, and Buck, Walter J. Unexplored Spain.
10 × 6½ : pp. xvi, 416 : plates. London, Arnold, 1910

Fraser, David. The Marches of Hindustan : the Record of a Journey in Thibet, Trans-Himalayan India, Chinese Turkestan, Russian Turkestan, and Persia. Edinburgh and London, Blackwood, 1907
8¾ × 5¾ : pp. xvi, 521 : maps, plates.

Führerbücher :
F. Biener, 1863–1881.
J. Imboden, 1864–1872 : 1871–1877 : 1882.
F. Imseng, 1863–1881.
P. Knubel, 1863–1872 : 1873–1875 : 1876–1881 : 1882–1911.

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J. Lochmatter, 1896–1914.
A. Pollinger, 1867–1881: 1882–1909.
J. Zumtaugwald, 1858–1883.
M. Zumtaugwald, 1858–1866.
S. Zumtaugwald, 1858–1863.

Gaillard, Emile. Les Alpes de Savoie (second volume). La frontière franco-italienne entre la Seigne et le Thabor. Guide pour l'alpiniste. Macon, Faure, 1917
7 × 4½: pp. xiii. 327: maps.

Geissler, Otto. Die Flora von Davos mit Angabe der Fundorte und der Zeit der Blüthe. Davos, Richter, 1882
6¾ × 4½: pp. 55.

Gsell-Fels, Dr. Die Schweiz. 2 Aufl. Volks-Ausgabe. Zürich, Schmidt, 1883
12⅓ × 8½: pp. 381: ill.

Heim, A. Panorama von Stätzerhorn, Kanton Graubünden. Chur, Hitz, 1878
90 × 7: tinted lithograph.

—— Panorama von Ruchen Glärnisch. Für die Section "Tödi" aufgenommen. Glarus, Senn & Stricker, 1870
108 × 7¼: tinted lithograph.

Heimatschutz. Bde. 10–12. Bümpliz, Benteli, 1915, 1916, 1917
9½ × 7: ill.

Lami, Marcel. Vers les cimes. Paris, Soc. d'éditions Louis-Michaud, 1914
Articles on the Pyrenees and neighbouring districts:—Collioure, Au Canigou, Dans les Basses-Aspres: Sur les cimes: Remparts de Perpignan: Chasse à l'isard: La Cerdagne: En Catalogne: Où les Pyrénées meurent: etc.

Lorch, A. Pervovoschozdeniya na vershini tsentralnavo Kavkaza. Sostavili H. Wooley i H. Raeburn. Dopolnol primyechamyami A. Lorch. In Kavkaskie Kurorti, Pyatigorsk, vol. 6, no. 15. 30 Nov. 1917
12½ × 8½: pp. 209–212.

Mallet, Robert. On the mechanism of glaciers, being an attempt to ascertain the causes and effects of their peculiar, and, in part, unobserved motions. Reprint from Trans. Geol. Soc. Dublin. Dublin, Hardy, 1838
8¼ × 5: pp. 21: plates.

Oberland bernois. Zurich, Photoglob, c. 1900
29 col. photographs, 6½ × 8½.

Pasumot, François. Voyages physiques dans les Pyrénées, en 1788 et 1789. Histoire naturelle d'une partie de ces montagnes; particulièrement des environs de Barège, Bagnère, Cautères et Gavarnie. Paris, Le Clère, an V, 1797
7½ × 4½: pp. xxiv, 420: map.

Ross, Malcolm. The first traverse of Mount Cook. Wellington, 'Evening Post,' 1906
9 × 6¼: pp. 32.

Ruskin, John. Traverse of Buet, 29th June 1835. Printed from MS. in 'Alpine Journal,' no. 219, vol. 32, pp. 334–6, June 1919.

Schalek, Alice. Tirol in Waffen: Kriegsberichte von der Tiroler Front. München, Schmidt, 1915
10 × 6½: pp. 119: plates.

Scheffel, P. H. Verkehrsgeschichte der Alpen. Berlin, Reimer
I. Band. Bis zum Ende des Ostgotenreiches Theodorichs des Grossen. 1908
II. Band. Das Mittelalter. 1914
10 × 7½: pp. viii, 207: viii, 297.

Sharp, Samuel. Letters from Italy. . . . In the years 1765 and 1766. To which is annexed, An Admonition to Gentlemen who pass the Alps, in their Tour through Italy. 3rd edition. London, Rivington, etc., n.d.
7¾ × 5: pp. 306–315.

Stoll, Armand. Le glacier de Trient en mai 1917. In La Géographie, Paris, 1917
t. 32, 31, no. 6–8.
10 × 7¼: pp. 427–428.

Studer, G. Panorama vom Männlichen, Berner Oberland. Jahrb. S.A.C. 10. Bern, Dalp, n.d.
70 × 11: tinted lithograph.

Swinburne, Major T. R. A holiday in the happy valley with pen and pencil.
8¾ × 5½: pp. xii, 342: col. plates, map. London, Smith, Elder, 1907

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Switzerland. Tourenbuch der Schweiz und nächsten Umgebung Hsg. v. Schweiz. Velocipedistenbund. 1. Aufl. Zürich, 1907
6 × 4¼ : pp. xi, 229 : map.

Utterson, W. E. Mrs. Stephen Winkworth's ascent of the Jungfrau, 1863. Reprinted in Alpine Journal, no. 219, vol. 32. June 1919
8¾ × 5½ : pp. 343–346, portrait.

Visser, Ph.C. Boven en beneden de sneeuwgrens. Utrecht, Honig, 1910
9¾ × 7 : pp. viii, 376 : plates.

Villars, D. Précis d'un voyage botanique, fait en Suisse, dans les Grisons, aux sources du Rhin, au Saint-Gothard dans le Département du Tessine . . . . . etc. Paris, Lenormant : Strasbourg, Levrault, 1812
7¾ × 4¾ : pp. (iv), 66 : plates.

Waldie, Jane. Sketches descriptive of Italy in the years 1816 and 1817. With a brief account of travels in various parts of France and Switzerland in the same years. London, Murray, 1820
6½ × 3¾ : 4 vols.

—— vol. 4, pp. 234–323 : Milan, Simplon, St. Bernard, Geneva.

Whiting, Lilian. The land of enchantment from Pike's Peak to the Pacific. 8¼ × 5½ : pp. xii, 347 : plates. London, Siegle Hill, 1910

Wordsworth, William. The prelude, or growth of a poet's mind ; an autobiographical poem. London, Moxon, 1850
8¾ × 5½ : pp. xi, 374.

Subject Index to Club Publications and New Works.

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Aig. du Géant : *C.A.F. Montagne.*
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—— U.S. Railroad Administr.
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—— Miller, L. A., Wilds of S.A.
Avalanches : Mougin, P., Dans le Vivarais.
Bibliography : *Appalachia.*
—— R.G.S. Literature.
Botany : Rytz, W., In der Schweiz.
—— *C.A.I. Riv. Mens.*, 1917.
Buet : Ferrand, H.
Caucasus : *Fell and Rock.*
Cime de l'est : *C.A.F. Montagne.*
Col du Géant : *C.A.F. Montagne.*
Col di Tenda : *C.A.I. Riv. Mens.*
Corno d. Tre Signori : *C.A.I. Riv. Mens.*
Dent du Requin : *C.A.F. Montagne.*
—— *C.A.I. Riv. Mens.*
Dolomites : *Fell and Rock.*
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—— *S.A.C. Jahrb.*
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NEW EXPEDITIONS IN 1919.

Mont Blanc Group.

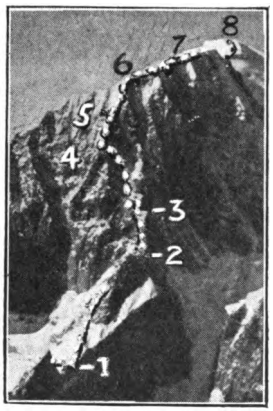
MONT BLANC (4810 m. = 15,782 ft.) BY THE SOUTH FACE. August 20, 1919.—S. L. Courtauld and E. G. Oliver, with Henri and Adolphe Rey and Adolf Aufdenblatten spent the night, August 19–20, 1919, on some rocks just to the North of the Col du Fresnay, about 11,850 ft.

The party, climbing on two ropes, left the bivouac at 06.05 on August 20, and went first by ice and then by easy rocks up the ridge which divides the upper Fresnay and Brouillard Glaciers. They passed a little below and to the West of the summit of a small peak

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mentioned by Mr. Eccles in ALPINE JOURNAL, viii. 411, and descended on to the Col. Thence they followed the continuation of the ridge, up easy but rotten rocks, until just below two red towers. The first of these was climbed by a difficult chimney to the left, the rock being nearly vertical but very firm, and the second which stands a little to the West of the ridge, was turned by climbing steep grey rocks on its crest (09.30). After passing some easier rocks the party halted for breakfast at 09.50, at about 13,600 ft.

Starting again at 10.25, the party passed along a short level knife-edge of snow, and arrived at a point where the ridge hitherto followed becomes very steep and uninviting; they therefore traversed to the left, into the broad couloir to the West. This couloir consisted of rock, snow, and ice; it is closed at the top by red cliffs which fall from near the summit ridge, and breaks away at its lower end into precipitous gullies and grey rock faces, which descend to the head of the Brouillard Glacier. Easy rocks were climbed on the left bank of the couloir for about half an hour; the party then crossed to the West over ice and rocks to a first and immediately afterwards to a second rib of rocks in the couloir, and ascended the second rib without difficulty to the point where it joins the right bank of the couloir. A gulley descending to this point from the crest of the conspicuous ridge forming the right bank of the couloir was then climbed by easy ice and rocks; and the crest was gained just below a prominent red tower with an overhanging top (12.30). The ridge was followed, either on the crest or just below it to the left, interesting climbing being provided by several towers of good rock and snow arêtes. A short halt to put on crampons was made at 13.30 at a point beyond which the ridge became broader and consisted almost entirely of snow; the snow being in bad condition, use was made of a few rocks which protruded to the East of the ridge. One section of very rotten snow was difficult. Finally a rather narrow arête of snow and ice, up which steps were cut, led to the main Brouillard ridge, which was joined at 14.45 at a point about two-thirds of the distance from the Pic Luigi Amedeo to Mont Blanc de Courmayeur. The party then followed the Brouillard ridge over snow and knobs of rock, traversing the snow portions a little below the crest on the North-West side, where the snow was in good condition. The last rocks, about ten minutes below the summit of



1. COL DU FRESNAY. (Bivouac.) Started at 06.05.
2. Point reached at 07.55
3. ,, ,, ,, 09.50
4. ,, ,, ,, 12.30
5. ,, ,, ,, 13.30
6. ,, ,, ,, 14.45
7. ,, ,, ,, 15.20
8. Summit ,, ,, 16.20

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THE SOUTH FACE OF M. BLANC

FROM PUNTA BIOULA (VAL SAVARANCHE)

(*Telephoto*)

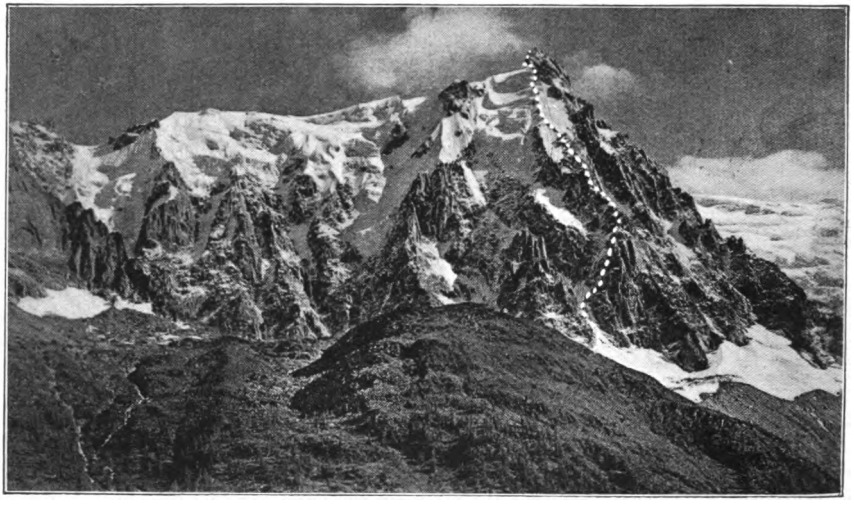
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Photo. W. F. Donkin]

CHARMOZ

FROM PIC DU TACUL



AIG DU MIDI

FROM PLAN DE L'AIGUILLE

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Mont Blanc de Courmayeur, were reached at 15.20. There a halt was made for lunch.

Proceeding at 15.40, the party traversed across the snow slopes below and to the West of the summit of Mont Blanc de Courmayeur and the rocks to the North of that summit; gained the ridge at its lowest point between Mont Blanc de Courmayeur and Mont Blanc and arrived on the top of Mont Blanc at 16.20.

The ascent occupied 10¼ hours, including three halts totalling about 1¼ hours.

The party left the summit at 16.30, reached the Vallot Hut at 17.00, the Dôme Hut at 19.30, and Courmayeur at 01.00 on August 21, the expedition having taken 19 hours including halts.

This is a fine expedition and deserves to be repeated, the route could also be used for a descent. It was not dangerous: the risk from stone falls in the couloir was so slight as to be negligible. The difficulties consisted in the steep rock pitches on the lower part of the climb, and in the bad snow below the Brouillard ridge; no long periods of step-cutting were necessary.

Aiguilles Grises Ridge (Mont Blanc). (Pt. 3377 m. = 11,076 ft. and the Ridge to Pt. 3647 m. = 11,962 ft.).—In the 1914 edition of the Kurz Guide four points are mentioned, 3247 m., 3377 m., 3647 m., 3800 m. env. Against the first two is 'pas d'informations'; 3647 m. accessible from the Dôme Hut, and 3800 m. from the Col where the ordinary Dôme route joins the ridge connecting 3800 m. with the main Bionnassay ridge. Point 3247 m. looks a short but interesting climb.

On August 7, 1919, leaving the Dôme hut (3120 m.) soon after 6 A.M., and climbing straight up steep snow and easy rocks, I struck the ridge between points 3247 m. and 3377 m. The ridge is good going without any difficulties over 3377 m. to 3647 m.; none of the points have any cairns, and it is hard to say which of two points close together is 3647 m.

Between points 3647 m. and 3800 m., there is some harder climbing, as three or four small points have to be passed. The first gave a pleasant scramble, the second was rather smooth and steep for a single climber of prudent habits, but a descent into a couloir above the Bionnassay Glacier enabled me to turn the difficulty; the rest was not at all difficult, a narrow bit of snow ridge finally leading from point 3800 m. to where the ordinary Dôme route falls in (6 hrs. to Dôme). A very cold wind and lack of condition precluded any idea of completing the ascent of Mont Blanc, and I descended from the Dôme to the Aiguille du Goûter and so to Les Houches. The Aiguille du Goûter is not nearly so good to descend as to ascend, the rocks of the most northerly of the ribs of rock being loose and steeper than those of the ribs further West, but if the easier rocks are taken the crossing of the big couloir when some steps in ice have to be cut is not without risk.

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There is a very small stretch, not more than a few score yards, just before leaving the Miage Glacier on the way to the Dôme hut where a concealed crevasse might be met with, but late in August or in a less snowy year the Glacier would probably be dry up to this point. With this exception the route is a good one for those who may be impelled to climb alone. It gets the sun some hours earlier than the Rochers du Mont Blanc route which is horribly cold owing to the high parts of the Brouillard ridge keeping off the sun till late in the morning.

R. L. G. Irving.

Aiguille du Midi (3843 m.=12,608 ft.) from Plan de l'Aiguille. August 5, 1919.—The objective on the upper part of the mountain was the steep snow-slopes and the edges of a hanging glacier seen from Plan de l'Aiguille immediately below the summit.

Starting at 2.30 A.M. the party crossed the northern arm of the Glacier des Pèlerins, mounted to the l. of a square-headed moraine and reached, at a point immediately above its bergschrund the first conspicuous couloir to the right of those on the N. face of the peak which are overhung by ice. This couloir was followed nearly to its elbow, when the rocks to the right of it proved easily accessible. This buttress is the true right bank of the most conspicuous long couloir which seams the N.W. face of the peak. The rocks were followed without difficulty to the foot of a formidable tower (breakfast 6.30 A.M.); after turning this obstacle on the right by the snow of a tributary couloir, the objective snow-slopes were gained and followed to the edge of the hanging glacier. To avoid cutting up the ice on the right, it was necessary to work up this edge to the bergschrund. A possibility soon presented itself of traversing to the left in order to gain the N.E. arête where a rocky buttress merges into it; but this alternative was rejected as the ice and rocks immediately below the arête looked exceedingly steep and repulsive. It proved possible to turn the bergschrund by climbing a broken ice wall at its western (r.) extremity. It would have been practicable again after this to have traversed to the left, then gaining the arête, by very steep snow, where a spike of rock emerges from it. The party, however, preferred a direct ascent to a point where a perpendicular wall of ice meets the rocks of the lower summit; it was hoped that these rocks could be surmounted easily, but in fact a pitch of 20 ft. was climbed only with great difficulty. The summit was gained at 12.15 P.M.

G. Mallory.
H. E. L. Porter.

Grands Charmoz (3442 m.=11,293 ft.) from Glacier de Trélaporte. August 2, 1919.—Starting from Montanvert we went up the Mer de Glace, contoured the lower slopes of the N.E. ridge of the Charmoz to the Glacier de Trélaporte, and breakfasted under

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the rocks. We then followed the line of previous parties when climbing the Grépon by this face (*v.* 'A.J.' xxv. 739, and xxvi. 260).

The bergschrund was crossed without great difficulty (6.15 A.M.) on the right. The snow above was in good condition, but it was necessary to chip steps till the rocks were reached and three deep avalanche funnels were crossed. Traversing first to the left, then up shallow grooves, and finally by the easy chimneys bounding the forbidding wall on our right, the level of the 'Red Tower' was reached about 8.30. It was now well away on our left. From this point our objective was a subsidiary arête or rib of rock leading to the first tower on the arête above the Aig. de la République. The lower end of this rib presents a conspicuous red wall and a slabby couloir lies to the left of it. We worked upwards, bearing to the left until near the couloir, traversed right under the red wall and reached the crest of the rib above it by an ascent up slabby but conveniently broken rocks covered in places with snow (10 A.M.).

The rib was then followed to the main N.E. arête of the Charmoz. There was little or no choice of route. The climbing was of a highly interesting character. When confronted, almost too dramatically, by the blank wall of the final tower, we traversed under an overhang to the left. Once the N.E. arête was joined, it was followed to the main crest of the Charmoz (4.15 P.M.) with comparative facility.

Joseph Pollinger, who made the first ascent on this side of the Charmoz, tells us that he went up by the couloir to our left—a fact which accounts for Kurz's condemnatory remark apropos of stones (*v.* Kurz, 1914, p. 191)—and then by a chimney directly to the summit. He says that some stones fell. Having regard to the quality of the rock, it is difficult to believe that the danger from stones can be extremely great even in the couloir. None fell, or seemed likely to fall, on our rib.

G. MALLORY.
H. E. L. PORTER.

Pennines.

LYSKAMM (4538 m. = 14,889 ft.) BY THE S.W. FACE. August 8, 1919: Messieurs Joseph and Baptiste Gugliermina. M. Joseph Gugliermina writes to Captain Farrar: 'The S.W. face is contained between the arêtes Perazzi and del Naso, and appears to have remained unexplored. A few details of this new ascent, made by my brother Baptiste and myself alone, may interest our colleagues of the A.C. On the morning of August 8 a violent wind delayed our leaving the Cabane Gnifetti until 5.45, when it got rather calmer. Following the ordinary route we were on the Calotte del Naso and at the foot of the S.W. face, on the W. plateau of the Lys glacier, at 8.15. This face, which we saw for the first time, presents itself really splendid and imposing. A direct route seemed quite possible; but

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for fear of falling stones or ice, we chose a safer route, commencing by a great rocky spur rather to our right. This we quitted higher up and took to the centre of the face, right to the summit. Leaving the plateau at 9.20, we were on the summit at 4. The ascent took time on account of the steps to be cut; almost everywhere was snow-ice. The rocks were not difficult and the route is interesting throughout, and to be recommended, *starting very early* from the Cabane Sella. Our route is marked on the fine photograph placed at our disposal by Mr. Vittorio Sella. On the summit the wind was again violent and drove us down at once. So as to be sheltered from it, we decided to descend by the S. arête (del Naso) which, covered with snow, took us more time than expected. A little above the Colle del Naso we left the arête and effected the descent to the W. Glacier de Lys by a spur of rocks, broken and unstable, crossing couloirs, and finally by a snow-slope, steep and frozen hard, which, after much work, led us to the bergschrund, gaping wide and very high, without any bridge. After long ineffectual attempts, we finally got over by a jump of 5 to 6 mètres. We reached the Cabane Gnifetti at 11.30 by moonlight, much pleased with our day. . . . Another important expedition, suggested by myself, was done on July 31, by our friend F. Ravelli and some friends, viz.: the first ascent of the W. Lyskamm (4478 m.) by the S. face. Details will appear later.'

VARIOUS EXPEDITIONS IN 1915 AND 1919.

Col du Mont Dolent (3543 m. = 11,625 ft.). E. G. Oliver with Henri Rey and Alexis Brocherel, August 24, 1915.—We left the Cabane du Jardin d'Argentière at 06.00 (French time), and reached the foot of the bergschrund under the Col at 07.10.

The bergschrund was in bad condition, and it took nearly two hours hard step-cutting to pass it (09.00).

We then cut straight up the ice-slope above the bergschrund to gain the lowest portion of the rocks considerably to the East of the couloir. The first few pitches of these rocks were not difficult, and we made good progress; but above the difficulties accumulated, as the rocks were partly covered with heavy lumps of snow, frozen hard on to them. We were gradually forced more to the East against the very steep rocks, descending from the Pointe du Pré de Bar. These rocks did not look practicable, and, after climbing some very difficult pitches passing under and to the West of them, we traversed in a westerly direction with great difficulty, moving very slowly until we reached a point close to the main couloir descending from the Col (16.00). From this point we could have traversed into the main couloir without much difficulty, and another ice couloir branching to our left in a South-Easterly direction offered an alter-

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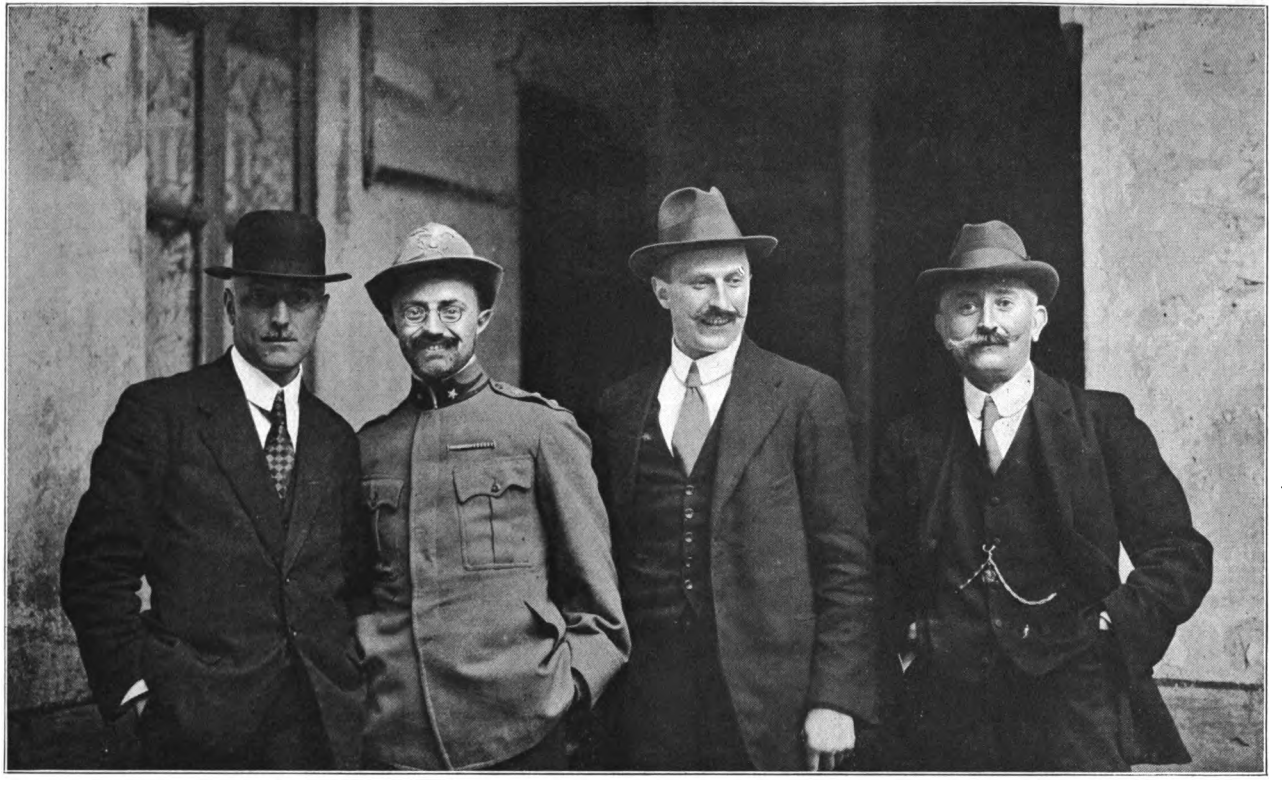


Photo. V. Sella]

S.W. FACE OF LYSKAMM

- - - - ROUTE GUGLIERMINA

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JOSEPH GUGLIERMINA CAPT. G. LAMPUGNANI F. RAVELLI BAPTISTE GUGLIERMINA

A GROUP OF DISTINGUISHED ITALIAN MOUNTAINEERS

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native route to the summit ridge. The rocks directly above us were very steep and plastered with snow and verglas.

After a short consultation we decided to try the couloir to the left, chiefly because the rocks above it looked not too difficult, and also fairly free of snow. An hour's step-cutting in hard ice brought us to the top of the couloir; but the rocks above proved much more difficult than we anticipated, and had a good deal of verglas on them.

After two hours of very arduous climbing, during which we were obliged to move with the greatest precaution, we reached the summit ridge and found we were on the top of a peak without name or height on the B.I.K. map, but described in Kurz's 'Guide de la Chaîne du Mont Blanc' (ed. 1914, p. 63), as P. 3614 m. between the Col and the Pointe du Pré de Bar (19.00).

Hence we descended on to the Col, which was reached at 19.30 (very difficult).

We at once started the descent of the Italian side and reached the last rocks above the bergschrund at 21.15 p.m.

Here we halted for the first time since leaving the hut and thought our troubles were over. We were fortunate enough to have a brilliant full moon. Without this we must inevitably have been benighted higher up.

We started again at 22.15, but found the bergschrund very high and difficult. Two and a half hours were consumed in step-cutting before reaching the level part of the glacier (00.45).

We reached La Vachey at 05.20 (Italian time), after nearly 22½ hours' going.

This was the most difficult expedition in which I have ever taken part, and both guides think the same. During the period of more than twelve hours, which were occupied in climbing from below the bergschrund to the Col, we were never for a moment comfortable, and were unable to halt at all. The expedition afforded a good illustration of how much the standard of difficulty depends upon conditions. We ought of course, in the conditions existing, to have cut steps straight up the couloir to the Col, using the rocks on the right bank where possible. As a matter of fact, we had determined to do this when we inspected the route while walking up the Argentière Glacier the previous day, as it was evident the rocks were badly plastered with snow. The couloir, however, looked so repulsive from just below that we weakly changed our intention at the last moment and took to the rocks.

We should again have saved much time if we had traversed into the main couloir at the point reached at 16.00, instead of taking the couloir to the left. We had no crampons; but I do not think they would have been much use in the circumstances. A longer rope would have helped us in places—we had only 100 feet and no spare rope. Fortunately the weather was very fine.

EDMUND G. OLIVER.

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AIGUILLE DE ROCHEFORT (4003 m. = 13,134 ft.) and DÔME DE ROCHEFORT (4012 m. = 13,164 ft.). S. L. Courtauld and E. G. Oliver, with Adolphe Rey and Adolf Aufdenblatten. August 9, 1919.—The party left the Rifugio Torino at 04.15, and reached the usual breakfast place below the Dent du Géant at 06.00. Leaving at 06.45, the ridge was followed, except that the large gendarme (P. 3933 m. on B.I.K. map) was turned on its North side; the top of the Aiguille de Rochefort[1] was reached by the rotten rocks on its North-West face at 09.15.

This arête, which was very narrow in places, consisted generally of snow, alternating with a certain amount of ice. It was interesting and difficult, chiefly owing to heavy cornices to the South.

The party left the top of the Aiguille at 11.10, and passing over the narrow arête between the peaks, reached the top of the Dôme at 13.15. This arête was even more corniced than the arête on the other side of the Aiguille, and afforded some interesting snow climbing. The final climb up the Dôme is on rotten rocks, but is quite easy.

The party returned by the same route; leaving the top of the Dôme at 13.45, they reached the hut at 17.30, and Courmayeur at 20.15, after a halt of rather over half an hour at the hut.

The return journey was more difficult as the snow had become soft in places owing to the hot sun, and the cornices required very careful manipulation.

Later in the season it was observed that the climb became much easier as many of the cornices had fallen down, and it would have been possible in some places to have taken to the rocks below the arête on the South side of it.

DENT DU GÉANT (4014 m. = 13,170 ft.), BY NORTH-WEST FACE. Mario Piacenza, S. L. Courtauld and E. G. Oliver, with Henri and Adolphe Rey, Joseph Carrel and Adolf Aufdenblatten, August 25, 1919.—The party started from the Rifugio Torino at 09.00 and reached the usual breakfast place below the Dent at 10.30. Leaving at 11.30, they passed over the snow shoulder leading towards the Rochefort ridge, and then descended to the North about 100 mètres on the East side of the Dent, and close to it, at first by ice and then rotten rocks, until below a rock couloir leading up to the prominent shoulder on the North arête of the peak. They climbed this couloir to reach the shoulder on which is a flagstaff (12.30).

From here they traversed over a sloping slab on to the North-West face, which was climbed, gradually traversing to the right until a chimney leading to the Col between the two peaks of the Dent was reached, by which the highest point was reached at 14.30.

They left the top at 15.30, reached the breakfast place at 16.20

[1] [*Cf. A.J.* xxv. 449 *seq.*, for information on the Rochefort arête.]

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by the ordinary route, and leaving this at 17.00 reached the hut at 18.15.

This expedition is not nearly so difficult as it looks. It is certainly very steep, but the holds are good; though care is required owing to rotten rock in places. In good condition and free from ice, it is, in the opinion of each member of the party, much more to be recommended than swarming up the ropes of the ordinary route.

MONT BLANC (4810 m. = 15,782 ft.), BY THE BRENVA GLACIER. S. L. Courtauld and E. G. Oliver, with Henri and Adolphe Rey and Adolf Aufdenblatten. August 13, 1919.—The previous day the guides had been sent to cut steps up to the Col de la Tour Ronde, but found the bergschrund under both East and West Cols impassable. They succeeded, however, in passing the bergschrund much further to the North under a small Col that forms the gap nearest Mont Maudit. (This appears to be the Col crossed in the opposite direction by Messrs. Bartleet and Mothersill in 1907.) This bergschrund was far from easy, and occupied 1½ to 2 hours step-cutting.

The party left the Rifugio Torino at 02.30 and crossed the Col above described over ice and steep rocks, reaching the upper basin of the Brenva Glacier at 05.30, after some trouble with the bergschrund on the further side. The night having been very warm the snow was far from good between the hut and the foot of the Col. At least 1½ hours was saved by the steps cut the previous day.

The Brenva Glacier was crossed, and a halt of half an hour made on the further side, where crampons were put on.

Close to the South-West rose the snowy flank of the great buttress, bounded by rocks on both sides. The crest of this buttress has been sometimes termed the Brenva arête, part of it being the ice arête, the passage of which is so graphically described by Mr. A. W. Moore in his account of the first ascent.

The steep snow-slope leading towards the crest of the buttress was ascended, the débris of numerous avalanches being passed on the way. The snow was very firm here and no difficulties were met with, until the bergschrund was reached below the final very steep slope leading to the crest of the buttress. This part of the climb is undoubtedly exposed to danger of ice-fall from threatening séracs above and to the right.

The bergschrund, which had a large overhanging lip, gave considerable trouble; but, after a good deal of step-cutting and a sensational traverse inside the bergschrund, it was surmounted and the top of the buttress reached at 08.10.

The danger in ascending the buttress by the snow-slopes could be avoided by climbing the rocks considerably to the left of the route above described; but this alternative looks considerably longer.[2]

[2] [*Cf. A.J.* xxviii. 306 *seq.*]

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The crest of the buttress was surmounted at a point above the narrowest part of the famous arête (which on this occasion was neither ice nor particularly narrow). It was here observed that an easier way over the bergschrund lay to the left of the route described, and would have brought the party on to the crest of the buttress, below instead of above the narrowest part of the arête.

The ascent proceeded up the arête over good snow (broad and easy) for about half an hour, until it merged in the face of the mountain; then, as the slopes above were all hard ice, a traverse to the right was made to gain a rib of steep rocks leading straight upwards. These rocks, alternating with snow and ice, were ascended without any particular difficulty to a point just below the highest rocks and close to the upper séracs (10.20).

Halt of twenty minutes for second breakfast.

From this point step-cutting in hard ice was for a long time necessary. The line taken was at first straight up the ice slopes, in continuation of the line of rocks already climbed, until further progress became impossible owing to ice-cliffs and large crevasses. The party then turned sharp to the left and traversed round the East and South sides of a very high and prominent pinnacle of ice, after passing which they turned to the right up a steep ice-slope, and on to an ice-ridge which connected the pinnacle to the glacier. Turning to the left along the ridge, direct progress was barred by a line of ice-cliffs; but a way through these cliffs was found by traversing along a shelf of glacier to the right. The séracs were finally passed at 13.15, after 2½ hours of continuous step-cutting in hard blue ice.

After a halt of about half an hour, the Petits Rochers Rouges were reached over easy snow-slopes at 13.55, and the top of Mont Blanc at 14.30.

The descent was at once commenced, and the Cabane Vallot reached at 15.00.

(Halt of half an hour.)

The descent was continued by the Dôme route, the snow on the Dôme Glacier being very bad.

The Dôme hut was reached at 18.00, and after a halt at the springs of water about half an hour below the hut, the party arrived at the Hôtel Royal, Courmayeur, at 22.30. Time, 20 hours including halts.

ALPINE NOTES.

'Ball's Alpine Guide.' The Western Alps.—Copies of the new edition (1898) of this work can be obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. Price 12*s.* net.

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'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—A new edition (1907) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of A. V. Valentine-Richards, Fellow of Christ's College, Cambridge, can be obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. It includes those portions of Switzerland to the N. of the Rhône and Rhine valleys. Price 6*s.* 6*d.* net.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART II.—A new edition (1911) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of the Rev. George Broke, can be obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. It includes those Alpine portions of Switzerland, Italy, and Austria which lie S. and E. of the Rhône and Rhine, S. of the Arlberg, and W. of the Adige. Price 7*s.* 6*d.* net.

MAP OF THE VALSESIA.—Some copies of the Map issued with the ALPINE JOURNAL, No. 209, and of the plates opposite pages 108 and 128 in No. 208, are available and can be obtained from the Assistant Secretary, Alpine Club, 23 Savile Row, W. Price for the set (the Map mounted on cloth), 3*s.*

CLUBFÜHRER DURCH DIE WALLISER-ALPEN (CLIMBERS' GUIDE TO THE PENNINE ALPS).—Vol. III., in 2 parts, of this new Climbers' Guide, edited by Dr. Dübi, covering the country from the Théodule to the Simplon, has just been published (in German). The price of the volume (to members of the S.A.C.) is 5fr. 15c. Post free from the Quæstor of the respective section. The book is so well furnished with route-marked illustrations that a very scanty knowledge of German suffices for its use.

The volume from the Col Ferret to the Théodule is in a forward state.

THE LATE F. W. NEWMARCH.—Mr. R. R. Howlett writes to Mr. R. W. Brant:—

'By the way, you make one slight slip in referring to the season of 1908. The climb, which took 20 hours, was the traverse of Les Ecrins from South to North, not the Pelvoux.

'Well I know it, as I was with Newmarch and we had enormous trouble in descending the North Face in bad weather.

'It was the only peak we did that season, owing to the shocking weather, but it was worth three ordinary peaks in interest and hard work.'

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Ascent of M. Blanc in 1854.—Notes from a letter of the late Mr. John Orred (uncle of Mr. H. G. Willink) and copy of Hotel Bill :—

'*Ascent of M. Blanc fr. & to Chamonix.*'

John Orred & 4 guides
Harry Rawson & 4 guides
Another gentleman & 4 guides
(15 people altogr.)

1854.

Mon. 11 Sept. Left Ch^{x} 7 A.M.
arr^{d}. G^{ds} Mulets 1 P.M.
T. 12 „ Got up at midnight.
Reached top in 6 ^{h} 20 ^{min}, stayed 35 ^{min}
G^{ds} Mulets in 3½ h^{rs}, stayed there 1½.
Arr^{d} Cham^{x} in 5 h^{rs}

'Fine weather. Perfection of sublimity.'

The syndic gave the travellers certificates of ascent signed by the guides. J. O.'s certificate states his weight, and that no man of his size had ever before seen the summit.

'A short time ago Mr. and Mrs. Hamilton went up to top.'

'Hôtel Royal de l'Union,
'Chamonix.
'Tenu par Ferdinand Eisenkræmer
'Propriétaire-maître
'Messrs. —— Provision du Mont Blanc.

		ff.
'Sept. 12	2 B^{lles} de Champagne	14
	4 B^{lles} de Limonade	4
	2½ B^{lles} de Cognac	12
	4 B^{lles} de Beaujolais	12
	8 B^{lles} de St. Fiun	20
	28 B^{lles} de Vin Ordinaire	28
	2 B^{lles} de Thée	4
	1 B^{lles} de Lait	1
	du chocolat	8
	des raisin confu	3
	2 gigots de moutons	16
	2 pièces de Bœuf et veau	14
	20 poulets rôtis	60
	du pain	6
	du Beure et fromage	4.50
	deux Bougies	2
	verres perdu 49 B^{lles} à 50^{ctimes}	24.50
	'provision du Mont Blanc	233
	'pr Acquit	135
		368

(signed) 'Eisenkræmer.'

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THE ALPINE CLUB OBITUARY.—

	Date of Election.
John Stogdon	1869
Frederick Anthony Wallroth	1869
Frederick Gardiner	1871
Rev. Florence Thomas Wethered	1873
Lt.-Col. Sir Henry Trotter	1875
Rev. Canon Arthur Sloman	1879
F. W. Headley	1882
John Herbert Wicks	1885
Charles Cannan	1885
Walter Larden	1886
Alfred G. Topham	1886
Rev. Canon Henry Martin	1896
Charles Edward Groves	1900
Dr. Francisco Moreno (Hon. Member)	1902

THE MEIJE.—On September 13 Mr. Raeburn, unaccompanied, made the traverse from the Bec de l'Aigle hut to the Promontoire hut, whence, next day, he regained La Grave, by the Brèche.

From the Gl. Carré he explored the descent to the Brèche by going down the arête about one-third of the way. He reports it extremely rotten. The weather turned bad, with hail, so he remounted to the Glacier and followed the ordinary line of descent to the Promontoire.

THE LATE MR. DONKIN'S PHOTOGRAPHS.—The stock formerly held by Mr. Spooner is now in the hands of Mr. J. P. Stevens, 100 Hazelville Road, N. 19. The small series is complete, and the larger copies of the principal negatives can also be obtained. Prices are 1*s.* 6*d.* and 12*s.* 6*d.* respectively. Lists are available.

CORRIGENDA.—'A.J.' vol. xxxii. (*v.* also p. 273), p. 367, line 18 from bottom, *read* '*Mr.* F. O. Wethered.' Mr. Wethered is a cousin of our very splendid veteran, the late F. T. Wethered. He rowed No. 6 in the Oxford boat in the 1885, 1886, and 1887 Inter-University races, and was formerly a member of the A.C.

P. 386, *for* 'about' *read* 'above.'

THE DEATH OF MRS. MORSHEAD is announced in *The Times* of Oct. 3.

TRAVERSE OF LES DROITES.—The late Karl Steiner's traverse, referred to in 'A.J.' xxxii. 365, was made from the Col between it and the Verte to the Col between it and Les Courtes. He kept to the actual ridge and the climb, which took fourteen hours, is described as more difficult than the Grépon or the Dru traverses. (Communicated by Capt. G. Finch.)

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A NEW ROAD is projected from Mégève to St. Gervais and *via* Bionnay over the Col de Voza to Les Houches.

M. PAUL MONTANDON writes to Capt. Farrar, October 26, 1919: 'I have also been up a new little summit in the Bietschthal, of 3500 m. height (S.E. of the Bietschhorn, in fact its S.E. shoulder), and a month ago I followed Mr. Young's steps up the Rote Zähne, [Gspaltenhorn] or rather over them. This latter ascent I am quite enthusiastic about, and if ever I can I will repeat it next year. Put it upon your future program in any case, and take Rumpf of Kienthal with you, who has done it twice now and knows all about it. I do not know of any ascent resembling this one—it is very original and the rocks and towers there are of the grandest description. There is, in fact, only one very difficult place—the overhang on tower No. 2—but it is very long, the (moderate) difficulties do not cease until you are almost on the top of Gspaltenhorn and the Abseilereien (5–6) are rather exciting—even afterwards, when you think about them.'

THE LATE CHRISTIAN JOSSI.—I have been away abroad for eight months, and have not seen the November number of the 'A.J.' I only heard last night at the Club Meeting of the death of my old friend Christian Jossi, news which causes me the greatest regret. Christian was not only a first-rate guide, master of ice-craft, and remarkably safe and good on rock, but he had the qualities that make a really good mate. Cheerful and good-tempered always, the only time I remember him in the slightest degree cross was one morning at the old Stockje hut, which used to be overrun with 'chamois.' I had slept the sleep of the just, with never a toss, while he and Peter Taugwalder had been tossing and tumbling about all night. He was very strong and absolutely untiring, and had an infinite capacity for hard work. I remember an awful long day we had by the Hühnergutz route up the Wetterhorn in bad weather. Bold, and yet extraordinarily careful, Christian had a most unselfish disposition, and added to all these he had another excellent qualification—he was a really good cook.

CLAUDE A. MACDONALD.

THE JUPPERHORN (GRISONS).—The route along the West ridge—first taken by Messrs. Solly and Williams, July 22, 1914 ('A.J.' xxviii. 401)—seems not to have been done since then, or at all events only by going round the red gendarme and by the South face.

On July 23, 1919, a Swiss party followed the ridge up to the peak, and then along the East ridge to the Mazzerspitze (Route Helbling, 1903). They began with a short stretch of the East ridge, then obliquely across the South wall somewhat under the ridge and back again to the ridge.

Owing to change in the weather they were obliged to descend,

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and climbed some two-thirds of the way down the rotten, steep South wall, until the steep pitches obliged them to continue down a snow-filled couloir. This route is probably new, and only to be recommended in a summer with plenty of snow, as the couloirs of the South wall are very dangerous on account of falling stones.—*Alpina*, September 15, 1919.

THE RIDGE FROM THE GRIVOLA TO THE GRIVOLETTA.—This ridge was traversed by Louis Pélissier of Valtournanche, and Cipriano Savoye and Enrico Rey of Courmayeur in August 1918. Rivista Mensile. 'C.A.I.' vol. xxxvii. p. 178.

THE GRAIAN DISTRICT IN 1919.—Those travelling in any of the three valleys of Lanzo would do well to avoid the week of fêtes in August. There is then scarcely a spare bed in the whole district. In any case, prices this year were enormous. In the Valsavaranche, on the other hand, they were phenomenally low, on a pre-war scale in fact. There is no big town within easy reach, as in the case of the Lanzo valleys.

At Ceresole, local guides reported that the useful Piantonetto hut had fallen into ruins. The Vittorio Emanuele hut was open and staffed, but the well-built and well-furnished little inn at Pont only supplied lodging without board. Next year it is hoped to open it again properly.

At Bonneval-sur-Arc, it is worth noting that the Levannas may be included in the fine list of peaks accessible from the excellent Evettes hut, though the expedition may take 12 hours, if more than one Levanna is included.

C. F. MEADE.

CHRISTIAN KLUCKER, of Sils-Fex, Engadine.—The many friends of this famous guide will be much interested to hear that his duties as President of the Commune of Sils-Maria, and threatened erysipelas in the head when exposed to strong sun, which from 1906 to 1917 compelled him to decline long engagements, are now such as permit of his resuming his work as guide. In the autumn of 1917, and the summers of 1918 and 1919, he was hard at work in the Bregaglia group, and among other expeditions ascended the Cima di Largo (twice), Punta Rasica, Ago di Sciora (three times), Il Gallo (twice), etc., etc. His engagements for the coming summer may take him toward the end of August to the Zermatt district, in which so many of his famous climbs were made.

Klucker is now in his 68th year, but writes that ascents, especially rock climbs, *noch sehr gut gehen.*

When one remembers the enormous strength and endurance of the redoutable little man, and the careful life he has always led, one can well understand his present powers. Moreover, in general

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intelligence, and in profound knowledge of a mountain in any conditions, he has never been surpassed, if indeed rivalled, by any guide of his generation, while as a travelling companion he is perfect. It is interesting to learn that Klucker is writing his mountaineering reminiscences. May he continue long in the pursuit to which he is an outstanding credit, and which he loves so well!

J. P. F.

Dr. Paul Güssfeldt.—The death of this eminent mountaineer took place in January. He was born in 1840, and was in his day among the very boldest mountaineers. He *descended* the Col du Lion by its great ice couloir on the Swiss side, led by Alexander Burgener. The expedition was carried out by Burgener on the initiative of Dr. Güssfeldt, and by every rule both of them ought to have been killed.

Much of his best work was done in the Bernina Group including the Güssfeldtsattel, the traverse of Monte Scerscen and the Berninascharte. In 1882 he made an expedition to the Andes, but two attacks on Aconcagua failed. His journey is described in his *Reise in den Andes.*

Dr. Güssfeldt's last great expedition was the traverse in 1893 of the Aig. Blanche de Peuteret and the Mont Blanc de Courmayeur. He was led by the great guides Klucker and Emile Rey, with the fine porter César Ollier. The expedition lasted 88 hours, and was a marvellous exhibition of unbending energy on the part of the traveller, at a time when his condition and bodily powers were past their prime.

He was the author of *In den Hochalpen* and *Der Mont Blanc.*

Mount Olympus.—The first ascent of the central peak of the Massif was made last summer by M. Baud-Bovy, the hon. director of the École des Beaux Arts at Geneva, accompanied by M. Boissonnas, the well-known photographer. A full report is announced.

EXPEDITION TO SIKKIM.—Mr. Harold Raeburn, 18 Bruntsfield Avenue, Edinburgh, is organising an expedition to leave England in April. Application should be made to him for further information.

Gottfried Bohren, the Gemeinde-President of Grindelwald, who is a thoroughly safe guide (speaks English), to whom I have been more than once indebted for information and work in the interests of the Club, is open to engagements this coming summer.

J. P. Farrar.

The History of Monte Rosa.—In my article 'The Early Attempts on Monte Rosa from the Zermatt side' ('A.J.' xxxi. 323 *seq.*), supplemented by Mr. Montagnier's article 'The Nordend and Summit Ridge of Monte Rosa from the Silbersattel' ('A.J.' xxxii.

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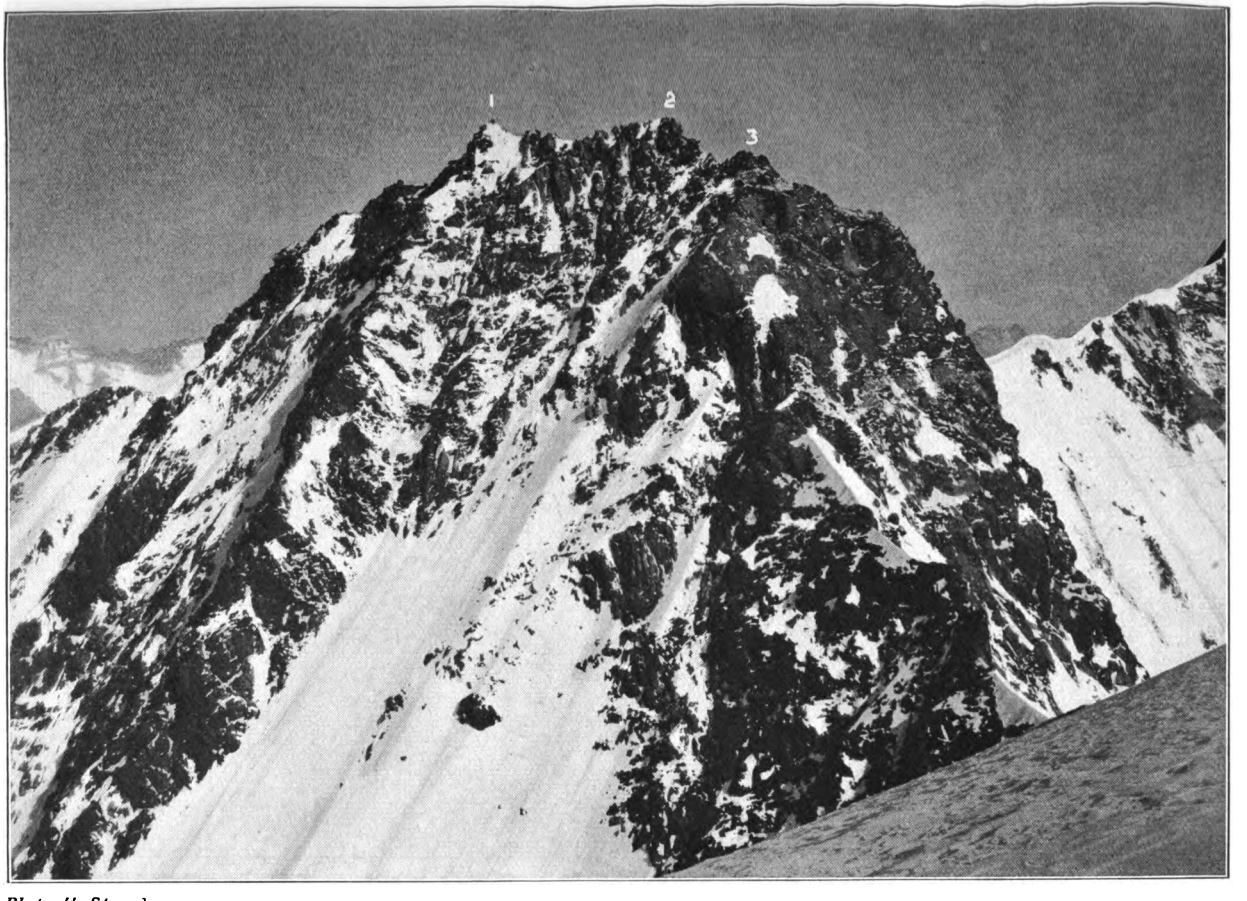


Photo. H. Speyer]

SUMMIT RIDGE OF MONTE ROSA

FROM ZUMSTEINSPITZE

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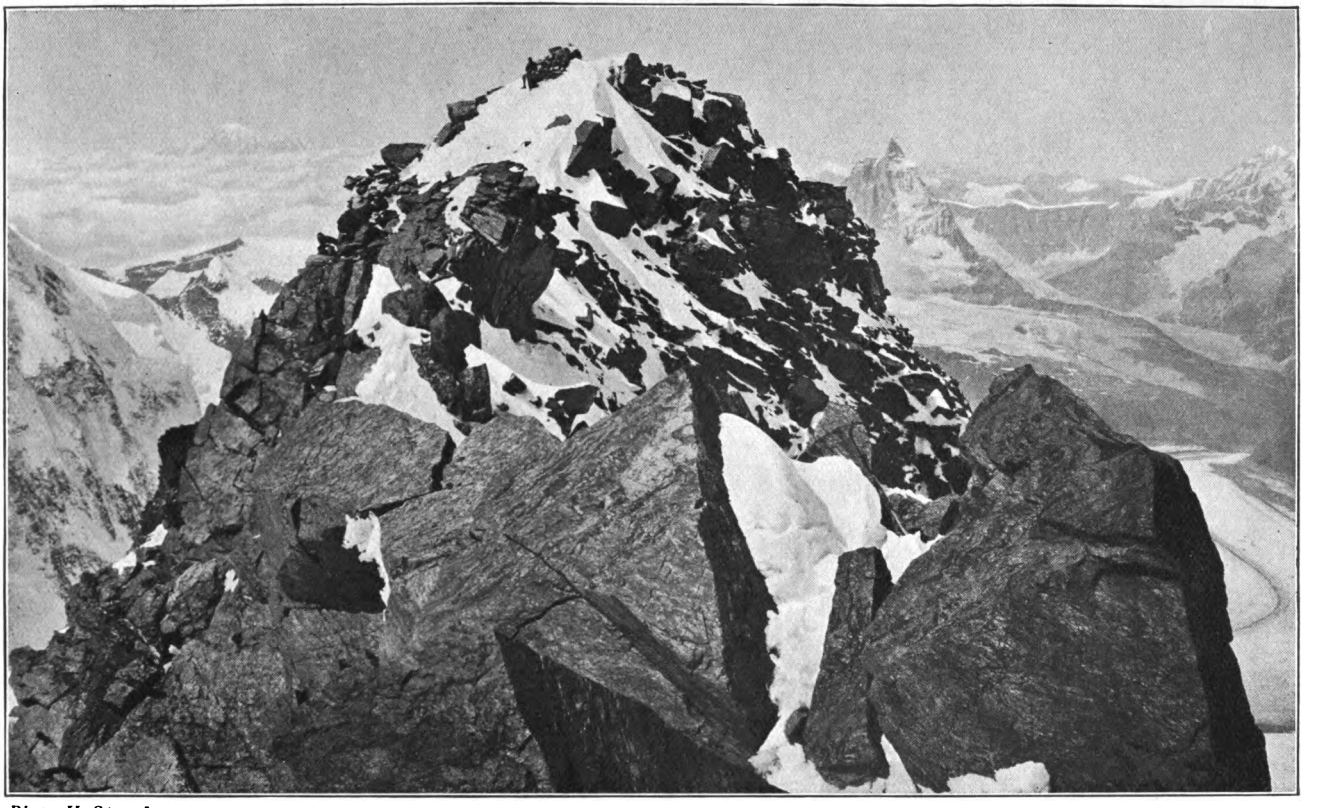


Photo. H. Speyer]

DUFOURSPITZE

FROM OSTSPITZE

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250 *seq.*), we gave nearly all the views that are necessary to the argument.

I am much indebted to Mr. Henry Speyer, whose many great expeditions in the nineties, mostly with the late Christian Jossi, are fresh in the memories of climbers of those days, for the photographs now reproduced.

The Summit ridge from the Zumsteinspitze is the reverse of the view from the Nordend (xxxii. *opp.* 250).

Point 1 is the Dufourspitze—the long ridge leading right to its summit is the so-called route 'by the rocks' or 'Cresta Rey.'

Point 2 is the Ostspitze.

Point 3 is point × or Grenzgipfel of Mr. Coolidge's 'Alpine Studies' (pp. 224–9). The ascent of this point from the Grenzsattel is easily made in about an hour.

The ridge leading to the Nordend is seen on the extreme right.

The view of the Dufourspitze from the Ostspitze makes it rather difficult to understand why the Schlagintweits and the Smyths, in 1854, did not continue to what they knew to be the higher summit, which was only attained the following year from the reverse direction. A man is seen seated on the summit rocks of the Dufour.

J. P. FARRAR.

The life of De Saussure, on which Mr. Freshfield and Mr. Montagnier have been engaged during the last four years, is now in the press.

CORRIGENDUM.—'A.J.' xxix. p. 352, line 19 from top, *for* 1906 *read* 1909 (Capt. Ryan's climbs).

THE LATE MR. WALLROTH.—As we go to press, we learn with great regret the death of this eminent member of over 50 years' standing in the Club. A full notice will appear later.

REVIEWS.

The Canadian Alpine Journal, vol. ix. 1918, vol. x. 1919.

As was perhaps to be expected, these two volumes contain very little actual mountaineering: in fact, apart from two articles by Mr. Fynn, which appear almost in the same form in our own JOURNAL, the only serious climbing paper is one in vol. ix. by Mr. Hickson, in which he records the conquest of Mount Moloch—a strange-looking and evidently difficult rock peak, at the head of the N. branch of Illecillewaet river (Northern Selkirks). It has repulsed an unusually large number of attacks by the writer of the paper and

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others, and only yielded after a severe struggle. Miss Edwards describes in charming prose and passable verse the process of being converted from a 'graduating' into an 'active' member of the A.C.C., and Mr. Harker treats the same subject in a frankly burlesque vein.

Among the papers which may be roughly classed together under the heading of 'Mountain Travel,' the letter from Lieut.-Colonel Mitchell, C.M.G., D.S.O., one of the Vice-Presidents of the Club, written from 'somewhere in the Asiago region' in April–May, 1918, is of outstanding interest; we shall hope to see transferred to the pages of the 'Bollettino' of the C.A.I.: if not the whole letter, at least the glowing tribute it contains from an expert mountaineer to the splendid work of the 'Alpini.'

The next place must certainly be given to the indefatigable Miss Jobe, who describes her third visit to Mount Sir Alexander (*alias* Kitchi), in the autumn in 1917—an expedition which, if not exactly mountaineering, was certainly serious enough in the way of incident, difficulty, and hardship to satisfy the most exigent mountaineer. She was again conducted by Curly Phillips,[1] who has established a sort of monopoly in that region. The outward journey, made nearly by the route followed on previous occasions, occupied from October 10 to 28, the return being made through the foothills, and the whole trip after the first few days was accomplished under severe winter conditions, which taxed Phillips's power to the utmost. Miss Jobe leaves the reader rather breathless when she observes at the conclusion of her narrative: 'At no time on the trip did I suffer from cold.'

From Mr. Bell Smith we get some delightful 'Artist's Reminiscences' of sixteen summers—beginning in 1887—spent in the Rockies and the Selkirks, and from Dr. Coleman a short but vivid summary of a journey through the Andes from the Uspallata Pass to Arequipa; one is surprised at the large extent of them that can be seen by railway and steamer.

To this group of articles must be added a remarkable account, in the 'Alpine Club Notes,' of Atlin Lake as a 'New Centre of Mountain Attractions,' by Mr. L. C. Read, 'guide and photographer, of Atlin.' Atlin Lake is reached *viâ* Skagway, and is situated far away in the extreme N. of British Columbia, not far S. of the 60th parallel of latitude; it is 90 miles long and surrounded by mountains running up to 7000 feet or more, which give rise to several large glaciers; the dimensions of one of them are estimated at 75 miles by 40. Mr. Read's avowed object is to attract visitors; but he writes in a way which inspires confidence both in his descriptions, which are illustrated by some excellent photographs, and in his qualifications as host and guide. In his prospectus for 1918, he offers to supply everything for parties of from two to four persons, besides conducting

[1] He subsequently served with the 78th Battery.

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expeditions in the neighbourhood—in part by motor-boat—for six dollars per head a day. 'I shall expect each one,' he writes, 'to help me slightly at camp duties and cooking, as I can't do everything alone, though willing to do all I can.' It is an engaging invitation, and makes one wish that one had gone, or was likely to go, to one of Mr. Read's camps.[2]

The scientific section contains, besides the record of Mr. Wheeler's latest observations on the Yoho glacier, notes on the flora, birds, and mammals of Jasper Park, by members of the Geological Survey. There is also a paper of a more popular character on birds and animals in vol. x.

Three more items remain to be mentioned in this readable and varied volume: an eloquent justification of 'National Parks,' by Mr. J. B. Harkin, their present Administrator; a paper of great historical interest on a recently discovered journal of David Douglas, fuller and earlier than the one previously known,[3] which undoubtedly throws much 'New Light on Mounts Brown and Hooker,' and on the way in which the well-known estimate of their heights first came into being; and lastly, a 'Bibliography of the Canadian Mountain Region,' in chronological order, beginning with Alexander Mackenzie's 'Voyages,' published in 1801. Valuable already, it will doubtless be rendered more complete as time goes on.

Volume x. (1919) may be more briefly disposed of. Mr. Bulyea's story of his camps in the Grand Forks Valley, and Mrs. Warren's paper on 'Byways of Banff,' are pleasantly written, but call for no special comment. Decidedly the most important contribution is Mr. Bridgland's article on Jasper Park, which contains much new topographical and orographical information.[4] Among the illustrations is a striking view of the true Mount Geikie, the peak referred to in 'A.J.' xxviii. 365, and Canadian 'A.J.' vi. 85. It may be worth while to add that Mr. Howard Palmer recently wrote to me: You will be interested to know that we reached the base of this mountain [in August 1919], and that it well justifies all you say of it. I am not aware of a more striking rock peak of this class in Canada. Its north-easterly face rises in an apparently smooth wall, 4330 feet sheer above the meadows, and gives a most forbidding impression to the would-be climber. Fortunately, we were not on conquest bent, having only made a short détour to have a close look at it, but the effort was well rewarded.'

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[2] Captain T. G. Longstaff also speaks very highly of the Atlin Lake District.

[3] See *A.J.* xix. 450, 465.

[4] From a review (p. 105 of vol. x.) of a 'Description of and Guide to Jasper Park,' issued by the Department of the Interior, it appears that the Guide is the outcome of a photographic survey of the central part of the Park, executed by Mr. Bridgland in 1915, and that the topographical portion of it was written by him. For information as to his maps see vol. ix. 165.

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In the scientific section, Mr. Sanson's article on 'Snow,' and 'Animal Life on the Snow,' contains some curious and interesting facts; Mr. Fynn's fine photograph of 'Snow Accumulations' recalls some of the snow-studies of Mr. C. T. Dent, who took a special interest in this branch of Alpine photography. Mr. R. Douglas, Secretary of the Geographic Board of Canada, gives an account of the origin, constitution, and functions of that body, with notes and illustrations of their principles and practice with regard to mountain nomenclature. It is well known that in that sphere the Board has a quite specially difficult and delicate task to perform. 'Slightly over 1000 names [query names of mountains only?] have been approved by the Board since its formation [in 1897]. Of these, 63 per cent. are personal or proper names, 28 per cent. are descriptive names, and 9 per cent. are of Indian origin. The latter are in the main descriptive.' One of the most recent exercises of the power of the Board has been to change the name of Mount Habel in the Yoho region, to Mont des Poilus, in appreciation of the magnificent services of our French allies in the Great War.

A. L. M.

The Playground of the Far East. By Walter Weston. John Murray. 18*s.*

If Englishmen may almost claim to have taught the Swiss the value of their Homeland as a playground for Europe, Mr. Weston has certainly done the same for the Japanese. But when he writes a book on the subject, who is there competent to review it, much less to criticise it?

Mr. Weston deals first with Fuji, the great snow-capped cinder-cone, which possesses scant mountaineering interest, notwithstanding the magnificent picture it makes; but he goes on, in three brilliant chapters, to deal in detail with the exploration of the Southern Alps of Japan, notably with the great peaks of Koshu. Then follow chapters on the Northern Alps. Good maps of both regions make the narrative quite clear, notwithstanding the difficulty of retaining the strange names. There are chapters also on non-mountaineering subjects (such as the parallelism between Modern Japan and Ancient Greece) which are strikingly original.

The book is very well illustrated, and is altogether a somewhat tantalising account of what one would fain were not quite such a far country.

On Alpine Heights and British Crags. By George D. Abraham. (Methuen. 10*s.* 6*d.*)

Mr. Abraham is well known as the great authority on mountaineering in this country. The present book takes the reader to the Dolomites and to the Oberland. The article on the Fünffingerspitze is very readable. There are chapters on 'The Work of the Alpine Guide' and 'How to Climb safely,' but it consists principally of vivid descriptions of work in Cumberland and Wales. The

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chapter on guides appears to be mainly concerned with accidents, which is what these valiant men are mainly concerned in preventing! and do prevent much more than is generally known.[5]

Are a guide's feet 'uniquely pliable,' or does he not rather seek a flat place, however small, to put his foot on?

Mr. Abraham's experiences on the Col de la Brenva with Melchior Anderegg (who, I think, made his last ascent of Mont Blanc in 1893) bear a close resemblance to a similar episode described in ALPINE JOURNAL, xxv. 56.

On p. 108 Mr. Abraham surely maligns Mont Blanc when he says 'a goodly number [of victims] are never seen again.' The incident in the Gabbett accident in 1882 is fantastic (p. 111). The Knubels can hardly be said to have 'wandered on to . . . the cornice' of Lyskamm in 1877, or to have become 'confused' (p. 112). What they did was to underestimate the overhang of the cornice, as may happen, and has happened, to men as good as even Niklaus and P. J. Knubel were.

There have been splendid guides in other centres than those mentioned, such as the Maquignaz in Val Tournanche, the Reys and Croux in Courmayeur. Rangetiner, Kederbacher, from farther afield, were unsurpassed in their day, and Angelo Dibona in later days has shown his powers singlehanded on the hardest expeditions in Dauphiné.

Mr. Abraham lays due stress on the training advantages offered by Cumberland, Wales, and Scotland.

I certainly do not admit that the 'gloomy side [of mountaineering] is ever persistently present.'

The 'stone couloir' on the Matterhorn has not been used for many years. Accidents in the Wetterhorn couloir have been mainly due to slips or possibly avalanches, not to stone-fall.

I certainly would not say that the dangers of falling into hidden crevasses 'have become exaggerated.' A glacier covered with new snow in brilliant sunshine is as dangerous a place as I know, and getting a man out of a crevasse is always a serious undertaking.

The chapter 'How to Climb safely' merits close attention.

The rest of the book is taken up with British climbing, and Mr. Abraham is there on ground where he has no master and few equals.

The book is well got up. Some of the many plates are very fine. That of the Mönch (opposite p. 158) is absurd.

Altogether a good book, breathing the air of the mountains.

J. P. F.

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[5] The details are not quite accurate. There were *two* survivors of the Burgener accident (p. 98).

Six guides and porters were lost without trace on Mont Blanc in 1870 (p. 103).

Three guides were killed with O. G. Jones (p. 125).

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PROCEEDINGS OF THE ALPINE CLUB.

THE ANNUAL GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, W. 1, on Monday, December 8, 1919, at 8.30 P.M., Captain J. P. Farrar, D.S.O., *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, Captain W. S. Blunt, R.E., Mr. E. Coddington, Lt.-Col. G. R. Crosfield, D.S.O., Mr. N. S. Finzi, M.B., F.R.C.S., F.R.C.P., The Rev. R. L. Langford James, D.D., Mr. G. F. McCleary, M.D., and Mr. J. C. Smith.

The PRESIDENT, in accordance with the provisions of Rule 29, there being no other candidates, declared the following members nominated by the Committee to be duly elected as Officers of the Club and Members of the Committee for 1920.

As President: Professor J. Norman Collie, Ph.D., LL.D., F.R.S.

As Vice-Presidents: Mr. C. H. R. Wollaston and Mr. A. L. Mumm.

As Honorary Secretary: Mr. J. E. C. Eaton.

As Members of Committee: Captain S. L. Courtauld, Lt.-Col. W. G. Johns, D.S.O., Mr. H. F. Montagnier, Professor E. J. Garwood, F.R.S., Mr. R. L. G. Irving, Rev. Walter Weston, and Mr. R. P. Bicknell, Major M. G. Bradley, and Captain E. V. Slater—the last three named in the places of Rev. W. C. Compton, Sir W. H. Ellis, G.B.E., and Mr. E. B. Harris, who retire by effluxion of time.

It was proposed and seconded and carried unanimously that Messrs. R. S. Morrish and G. E. Howard be re-elected Auditors to audit the Club accounts for the current year.

Professor J. NORMAN COLLIE, F.R.S., said:—Mr. President and Gentlemen, I need hardly say that I feel extremely honoured, more than honoured, in being elected President of this Club, because, as we all know, it is not an ordinary Alpine Club, but *The* Alpine Club, and to be made President of The Alpine Club is a very great distinction. As far as I am concerned, I do not think, in fact I know, that I cannot have a greater honour offered to me. When I was elected a Member I was very much gratified, and looked upon the other Members with awe and reverence, and I must say that I still possess a great measure of those feelings. Therefore, I am somewhat anxious and nervous of being made President, for it is a post that needs somebody who understands the procedure of the Club well, but I hope that I shall behave satisfactorily during my term of office. I remember before I was a member of the Alpine Club, and was desirous of being put up, Mr. Alfred Williams gave me a long lecture on the Alpine Club and the duties of a Member, which I have not forgotten. To succeed Captain Farrar in the Chair will be a difficult thing. I know perfectly well that I cannot possibly do what Captain Farrar has done. He is a man

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who has looked after the interests of this Club in a way that few could accomplish. He has been busy during a time of trial and trouble, writing many papers for the JOURNAL; he has saved for the Club all kinds of old stories of first ascents and early mountaineers that were in danger of being lost entirely, and that were really worth saving. He has also presided over these Meetings in a way that none of us can hope to excel, but I hope that, although he is relinquishing his office, I shall have the benefit of his counsel and experience. We are indeed fortunate to have had such a President. His untiring energy and his courtesy in matters connected with the post of President, his great wisdom and knowledge in Alpine matters, and his enthusiasm for all that is good in mountaineering leave the Club deeply in his debt. I will do all that I can to further the interests of the Club. (Cheers.)

The PRESIDENT delivered an Address.

Mr. C. H. R. WOLLASTON said:—Gentlemen, a task, in itself very pleasant, falls on me to-night, as your senior Vice-President, though on other grounds I could wish that it was in more capable hands for, as you all know, I am no orator. The subject, however, on which I have to say a few words is one that would make even a dumb man speak. I ask you to pass a very hearty vote of thanks to Captain Farrar, our retiring President, for his very interesting Address to-night, and for the invaluable services he has rendered to the Club during his term of office.

No man who has filled that office before him has been better qualified in any way than he is.

As a mountaineer his reputation is worldwide. As many of you know he commenced his climbing career some forty years ago. He learnt all that there is to learn of the science of mountaineering under some of the best guides that there have ever been, namely, Johann Grill, commonly known as Köderbacher, Peter Dangl, Klucker, and particularly Daniel Maquignaz, and he has, accompanied by one or another of them, made nearly all of the principal ascents from Tirol and the Dolomites through Switzerland to Mont Blanc, to the Graians, and to Dauphiné, and on to the Viso, and as far as the Alpes Maritimes. Further, he profited so much by the experience he gained with them that he has been for many years, and still is, perfectly qualified to act as a thoroughly capable leader of a competent guideless party on all reasonable expeditions.

To turn to another point, I entirely concur in all that Professor Collie has said regarding our President's excellent work. As Assistant-Editor of the JOURNAL his original writing, if I may venture to say so, attains a very high degree of excellence, and, as a sample, I should single out his 'In Memoriam' notice of his old guide, Maquignaz. There the whole heart of the man speaks out in saying '*Ave atque Vale*' to 'his leader on many a glorious day of triumph.'

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I am sure you all will agree with me that Mr. George Yeld, the Editor, and Captain Farrar between them have continued to bring out a JOURNAL which, though reduced in size, as was inevitable, has been a joy to read.

As President of the Club, and this is the point on which we have to centre to-night, I can say without fear of contradiction that Captain Farrar has carried out every duty of that office with the utmost zeal and discretion. At our General Meetings, at every one of which he has taken the Chair, he has presided over us ably and genially as we knew he would, and his opening remarks on affairs in which we are specially interested have always been terse and complete. As regards the Committee he has never failed to attend its meetings, and his knowledge, his grip of business, and his sound common-sense have been of the greatest service. I can say, too, of him that whenever some pressing matter arose in the daily routine business of the Club which wanted immediate attention, one had only to telephone to him and he would come here, at whatever inconvenience to himself, before the day was out, to settle and arrange it.

To sum up, he is entitled to a very high seat among his illustrious predecessors in the office of the President of this Club.

I ask you, Gentlemen, to pass a very hearty vote of thanks to Captain Farrar, our retiring President, for his interesting address to-night, and, more particularly, for his invaluable services to the Club during his term of office.

I call on Mr. Herbert Reade, one of his old companions in arms, to second this vote.

Mr. H. V. READE said:—It gives me the greatest possible pleasure to second the Vote of Thanks. Captain Farrar might be regarded from three aspects, as a climber, as co-Editor of the JOURNAL, and as President. I have known him as a climber since 1907, when Gask and I asked Farrar to join us. We were rather alarmed when the invitation was accepted for we knew that Farrar had been at it longer than the two of us put together, that he had always gone with the best of guides, and had done most of the big things in the Alps. We had also heard that he was occasionally a little autocratic, and altogether, we felt like two curates who were going to walk with the Bishop. But we found Farrar the best of companions, not only a tower of strength on a mountain, and full of resource, but also full of fun. We learnt much from him, and perhaps he learnt a little from us, and we might claim to have finally converted him to guideless climbing. A little later, Farrar was persuaded to form one of Mr. Geoffrey Young's parties in Wales, and there again they were a little afraid that he would consider the whole thing rather trumpery, but he was delighted with the mountains, and quite impressed with the character of the climbing.

Professor Collie and Mr. Wollaston have already testified to the admirable way in which Farrar has filled the post of President.

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I would only like to refer particularly to the tact with which Farrar had handled some thorny questions, and the geniality which had prevented differences of opinion from developing into personal differences which would impair the harmony of the Club.

As joint Editor of the JOURNAL, Farrar has done wonderful work. The JOURNAL was admirable before, but Farrar's complete knowledge of everything which had been done in the Alps, and the way in which he was always in touch with foreign clubs and climbers, has enabled him to make the JOURNAL a record of all important expeditions, to check and edit the accounts of climbs sent in by Members, and to add those notes which were often longer and more valuable than the original text. The trouble which Farrar took to obtain contributions, especially those accounts of early expeditions from the pioneers of the Alps, which have been such a feature in the last year or two, has earned him the gratitude of the Club, and we would all be glad to think that his retirement from the Presidency would leave him even more time to devote to this valuable work.

Mr. G. WINTHROP YOUNG asked permission to add one word, on behalf of the junior Members of the Club, although he might possibly be regarded as speaking retro-actively. The junior Members were accustomed to meet with indulgence and sympathy from their Alpine Club seniors. Captain Farrar had embodied this spirit, and interpreted it in a very wide sense. No juvenile ailment (such as 'New Routes') had been too small for his examination: no ambition too large for his encouragement. It was a consolation to think that, although they lost him as President, yet as writer and as mountaineer the younger generation would still be in contact with a personality of such critical but all pervasive enthusiasm, indomitable courage, and almost unique generosity.

The vote of thanks was carried with acclamation and the PRESIDENT briefly replied.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, London, W. 1, on Tuesday, February 3, 1920, at 8.30 P.M., Professor J. Norman Collie, F.R.S., *President*, in the Chair.

The following candidate was balloted for and elected a member of the Club, namely, Mr. Georges Charles Dimier.

THE PRESIDENT announced with regret the deaths of Mr. Charles Cannan and the Rev. Canon A. Sloman, Members of the Club, elected in 1885 and 1879 respectively, and also of two former Members, Mr. Alfred Parsons, R.A., and Mr. P. J. de Carteret.

DE CARTERET came from the old Jersey family of that name, and could trace his direct ancestry back for centuries.

During the eighties and nineties he was living with his family on the Lake of Geneva, and, being a man of leisure and of great activity, he did an immense amount of climbing, to a great extent guideless, both in summer and winter.

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He made one of the earliest winter ascents of the Jungfrau. He was tremendously strong and active and nothing could tire him.

In the early nineties he came to live in England, and took Hanham Court, near Bristol, taking very great interest in local affairs and War work.

Though his visits to the Alps got fewer, he always maintained a very great keenness and love of the mountains.

Mr. GEOFFREY E. HOWARD read a paper entitled 'Compensations.'

A discussion took place in which Sir Martin Conway, Sir Alexander Kennedy, Mr. Douglas W. Freshfield, and Mr. Hugh E. M. Stutfield took part.

The PRESIDENT proposed a very hearty vote of thanks to Mr. Geoffrey E. Howard for his most interesting paper, which was carried with acclamation.

Every member of this Club will learn with profound regret that

Mr. HERMANN WOOLLEY,
President A.C. 1908–1910,

died on February 27, in his seventy-fourth year.

We learn with much regret that

Dr. ALEXANDER SEILER OF ZERMATT

died suddenly at Berne, on March 5, in his fifty-seventh year.

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THE

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(No. 221.)

By-Ways in the Hindu Kush.

By T. G. LONGSTAFF.

(Read before the Alpine Club, March 2, 1920).

I HAVE called this paper 'By-ways in the Hindu Kush,' in the hope that you will not expect a genuine mountaineering record. I am actually a stop-gap to-night. I was merely a stop-gap—I trust in both senses—in 1916–17; and you will perceive that, though I was playing only a very insignificant part, quite at the back of the stage, mountaineering (as we understand it) could have no place in the programme.

By discarding my spectacles, and assuming an eye-glass, I succeeded in joining the 7th Territorial Battalion of the Hampshire Regiment on August 4, 1914. Quite unexpectedly we found ourselves in India three months later. In 1915 I was sent to Simla—on the strength of a reputed knowledge of the northern frontiers. In the following year, owing to the very great kindness of the officers under whom I was serving, and as I shall always believe though my membership of this Club, I obtained an appointment under the Political Department, and was posted as Assistant Commandant to the Gilgit Corps of Scouts Frontier Militia. From there I was sent up to Gupis in Political charge, under the Political Agent in Gilgit, of Punyal, Ishkoman, Yasin, Ghizr, and Koh. Fort Gupis (7200 ft.) is the most northerly military post in the Indian Empire, and the connecting link between Gilgit and Chitral. There is only one British officer posted to this district of more than 4000 square miles; so it seemed now

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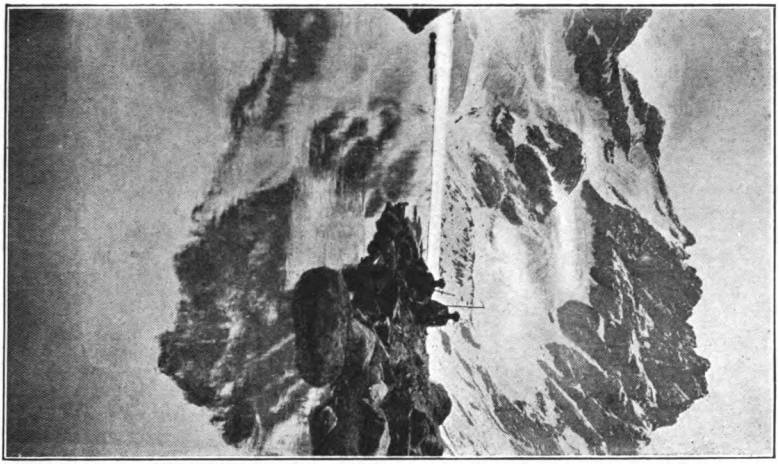
quite safe to resume my spectacles. I will inflict no further autobiographical details on you, but turn to the more interesting topic of the by-ways which it was part of my duty to know, and in some cases to explore.

The Hindu Kush is the western prolongation of the Karakoram range. For convenience, it may be said to commence on the right or western bank of the Hunza river and to terminate 500 or 600 miles away in Afghanistan, about the sources of the Helmand. Tirich Mir (25,426 ft.), in Chitral, is its culminating point. The chain consists of two or three more or less parallel ranges, and the orography is almost as complicated as that of the true Himalaya. Its eastern half constitutes the frontier between British and Afghan territory, and from several of the passes Russian territory can be seen across the Oxus. Other passes lead directly to the Pamirs, and so to Chinese territory.

Passing over Astor, Gilgit and Hunza, as already known to the Alpine Club through the writings of our President, Conway and Bruce, I will confine myself to the political ilaqas of Punyal, Koh, Ghizr, Yasin and Ishkoman. Reference to a map shows that British territory makes a great semicircular sweep from Kashmir to Chitral, half-surrounding the independent tribal territories of Darel, Tangir, Killi or Kandia, and Bashqar, which in turn abut on Dir and Swat. Thus our tribal frontier forms an arc of 150 miles while the chord (Gupis to Chilas) is only 60 miles. It is an extreme instance of divergence and convergence of internal and external lines. You will realise that it is incumbent upon me to observe a certain reticence of detail in the following notes.

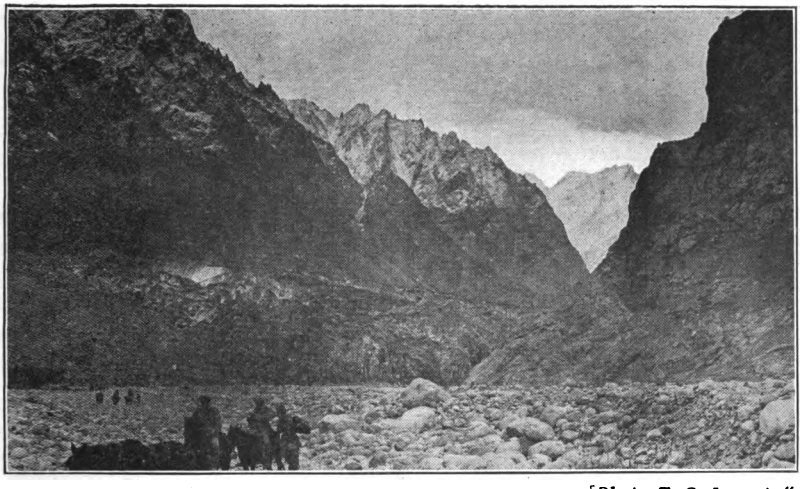
The chief feature of this region is the valley of the Gilgit river, which rises on the Chitral border and flows, under different names, for over a hundred miles through east to south. It receives from the north several large glacier-born affluents and is joined by the Hunza river before its junction with the Indus. This valley is a mere trench cut through the hills, bare, arid and cliff-bound. It is subject to great extremes of temperature; also to floods and mud slides. The vegetation is scanty, except where irrigation can be practised, when the summer heats enable even the grape to ripen. Such sun-loving birds as the hoopoe, roller and golden oriole, with desert chats and wheat-ears are found in summer; while in winter it is invaded by wall-creepers from the higher ranges, and by ducks on the autumn and spring migrations between Siberia and peninsular India. I will make use of this well-marked feature

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[*Photo. T. G. Longstaff.*

KINNICHISH, DAREL FRONTIER.



[*Photo. T. G. Longstaff.*

CHILLINJI GLACIER, KARUMBAR VALLEY, ISHKOMAN.

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to divide the country into two sections, a northern and a southern.

On the southern side a series of incredibly precipitous gorges give access to beautiful but scantily wooded valleys, which in their turn lead up to well-watered Alpine pastures, decked with a profusion of wild roses, forget-me-nots, primulas and gentians. The birds are now of a different order; the blue-throats and red-starts of several varieties being especially attractive. The relief, after the heat and constraint of the main valley, seems to be reflected even in the sky itself. These upper glens are without permanent inhabitants, but the trans-border tribes to the south annually come over the divide for the summer grazing. It is the lower precipitous defiles, passable only with much difficulty, that form the real barrier to intercourse, and not the actual frontier range. Fortunately for us, these people are much easier to deal with than the Pathan. The notorious Puktun Wali succeeded in establishing himself in Darel, but was very properly murdered before I left. Stein passed through Darel in the course of one of his many journeys. Tangir is practically unknown to us. Killi and Bashqar are quite unexplored. The latter is a land of mystery, our own tribes asserting that they cannot comprehend its barbarous language. When it is remembered that, in the Gupis district, four very different and apparently unrelated languages (Kowar, Shina, Wakhi, Burushushki) are spoken, this point is curious. The few Bashqaris I saw were obviously on a far lower plane of civilisation than any of the other neighbouring tribes and I could not help wondering whether they are not some lost sept of the Kafirs. I was told that they still habitually use the bow, and are inveterate thieves.

The actual frontier consists of a range of more or less glaciated mountains, rising in the west to over 19,000 ft. and broken by passes of from 14,000 to 16,000 ft. In several cases the northern glaciers discharge on our side into lakes and tarns. These are not only beautiful in themselves, but act as traps or filters and purify the streams which flow down our valleys. The principal peaks are Kinnechish, probably between 16,000 and 17,000 ft., Shagachi about the same height, Chokinibush 18,750 ft., a nameless group between the Anogol and Ambesh, and Dadalbho 19,250 ft. on the Laspur border. The latter peak lies at the head of the Shatmalai, which should be the most picturesque of all these beautiful glens; but I never had time to penetrate its recesses. Probably none of the peaks I have just referred to have ever been climbed

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by anybody; nor are they ever likely to be, not on account of any physical difficulties but owing to local prejudices relative to tourists.

On the western border, the well-known Shandur Pass (12,250 ft.) gives access to Laspur, Mastuj and Chitral. The scenery is tame, and the hills, including Shano Zom, are of little interest, except that from them wonderful views of Tirich Mir may be obtained in clear weather.

We must now turn to the northern section, commencing with Yasin, so long a scene of the bloody and unending feud between Kator, Kushwakt and Burush. Owing to various reasons this small state gave me a good deal of worry, and I was never able to explore its fine glaciers as I had hoped to do. It is bounded on the north by the highest range of the Hindu Kush, here called on some maps the Sakiz Jarab. North of this again lies the upper valley of the Yarkhun river, some 10 miles broad, which belongs to Chitral. The latter valley communicates directly with Afghan territory by the easy Baroghil Pass (12,460 ft.), on the crest of the northernmost range of the Hindu Kush, the true water-parting or divide. But this northern range is here much lower than the southern or Yasin range, and in this section is quite easy. Thus frontier conditions are similar to those found along the Tibetan border in Kumaon and Sikhim, where our uppermost frontier valleys are easier of access from the north than through the highest crest line, which lies well inside our own territory to the south.

The chief peaks of the Yasin group, from west to east, are the peaks of Tui 21,891 ft., Daspar 22,603 ft., Dhulichish (the Daspar of maps) 21,409 ft., Darkot and Garmush 20,564 ft. I only visited the group of glaciers which descends from the soaring peak of Dhulichish nearly to 9000 ft., opposite the hamlet of Darkot. Near by is the spot at which that intrepid explorer Hayward was murdered in 1870 by the treacherous Mir Wali Kushwakt. The latter was slain by his own brother Palwan, who was murdered again in his turn by another brother. I might add that the name Palwan means 'Hercules' and is the title still applied to Bruce in Gilgit and Hunza. The Darkot pass (15,380 ft.) lies at the head of the valley. It is a long and rather steep glacier route, but horses are taken over it. Stein has shown that it was traversed in A.D. 747 by a Chinese army from the Oxus, an astonishing achievement.

In Ishkoman I was luckier. It is one of the most fantastic and wonderful mountain fastnesses into which I have ever

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penetrated—a 50-miles defile enclosed on both sides by peaks of from 19,000 to 22,000 ft. Its lower reaches have been colonised by Wakhis, refugees from Afghan frightfulness, and we have recognised Mir Ali Mardan Shah, last ruler of Wakhan, as Chief of the district.

The lower Ishkoman river, fed by a number of large glaciers, is unfordable except in mid-winter. Owing to this I was not able to visit what seemed to be a perfect circle of megaliths, a miniature Stonehenge, on the right bank, which I think will some day prove of very great interest. Due north rises a huge compact block of mountains rising to over 21,000 ft., and absolutely virgin ground. Above Imit, the chief village, all trace of the bridle-path soon dies away, and the stony bed of the river, now known as the Karumbar, is our only track. From here onwards the route is hardly practicable, except in October. At the Bhort glacier (9000 ft.) I introduced my Yasini orderlies to a presumptive cave of the Jinn, to their unbounded amazement. It was a perfect ice-tunnel, open at both ends, over a hundred yards in length, and lofty enough for a camel.

Two marches above Imit, the Karumbar glacier enters the main valley at right angles from the east. I think it must have a considerably longer course than is shown in the maps. In 1916 it left no passage up the main valley, abutting directly on the cliffs of the right bank of the Karumbar river, which had tunnelled a passage beneath it. So our horses had to be led over the glacier, which took them two hours to cross from side to side. Above this the going was very severe for the horses, especially where we had to take to the river and skirt along under the steep face of the Bukh glacier, which tried to drop stones on us.

We are now nearing the Pamir—the Bam-I-Dunya, or 'Roof of the World.' The weather was cold and clear and the abrupt cliffs and imminent peaks on either hand stood out clear of the haze and cloud of the south. The Wirgot glacier, abutting on the right bank of the river, was the next obstacle. We could just creep round its snout dryshod (October 21, 1916); but the horses were repeatedly forced into the river, and eventually had to struggle across with difficulty out onto the left bank. In 1909 this glacier is said to have completely closed the valley and to have dammed back the river sufficiently to form a lake behind it. In 1893, and again in 1905, some one or more of these lateral glaciers blocked the Karumbar valley, damming up the river behind. A large lake was thereby

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formed, whose increasing pressure suddenly burst the dam and carried destruction right down to Gilgit.

Above the Wirgot glacier the horses were brought across the river to us, and carried us back again to the left bank. Their ability to keep their feet, amongst the boulders invisible under the rushing ice-water, was truly astonishing. On either side, the cliffs here shoot up into sheer spikes and towers—of naked living rock—while beside the river, for contrast, are lovely thickets of juniper, birch, willow, roses and other shrubs. Ahead, the Chillinji glacier lies across our path, sweeping down from the east past the foot of the Chillinji Pass (17,000 ft.), the river burrowing beneath its base. Though only half the breadth of the Karumbar glacier it is more difficult for the horses to surmount, the descent on the northern side straining their powers to the uttermost. An impending cliff again forces us across the river to the right bank, to find a passage below the moraines of the Sokhta Robat glacier. Here we encountered a small party of Kirghiz, their smiling faces such a welcome contrast to the churlishness which the Wakhi never seems able to banish from his countenance. The camping-place of Sokhta Robat (11,200 ft.) lies on a charming little flat amongst the last dwarf willow and silver birch, sheltered by the outermost lateral moraine of the glacier. All our difficulties are safely overpassed. Ahead, the valley opens out into a broad level upland pasture, with the brilliant white Chashboi glacier gleaming beyond. To the north, beyond a great range of cliffs, rises the Khora Bhort Pass (15,000 ft.) leading directly on to the Little Pamir and the sources of the Oxus.

I must close these rambling notes with a word of warning. In all the circumstances of the case, it is unreasonable to expect the Indian Government to give facilities for private travellers to visit these ranges. No one can regret this more than the writer; for the whole region, its peoples and history, have a most alluring and unique quality, and in this portion only of High Asia have I recovered the elusive and romantic charm of the Caucasus.

Colonel Sir Francis Younghusband, President of the Royal Geographical Society, said:—

My story of the by-ways of the Hindu Kush must begin where Captain Longstaff's has left off. In the last photograph which he threw on the screen, he showed us the main range of the Hindu Kush where the Khora Bhort crosses it, and I will now describe how it

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came about that I crossed that range by a pass—in the neighbourhood of the Khora Bhort—which had never been crossed by a European before, nor, as far as I know, by any since.

In the years 1889, 1890, 1891, I was sent by the Government of India to the Pamirs—the 'Roof of the World'—to explore the far side of the Hindu Kush, ascertain what practicable routes might lie across it leading from Russian territory towards India, and find out to whom the various inhabitants owed allegiance—whether to China, Russia, or Afghanistan.

In the year 1891 I heard that the Russians had come down in force, and were annexing the Pamirs. I thereupon marched towards the Russians, rode into their camp, asked to see the Commander, and then told him that I was an agent of the Government of India, that I had heard from the natives that the Russians were annexing the Pamirs, but that this was so important a matter that I did not like to report it on merely native evidence, but should like to know authoritatively, from him himself, whether he was annexing the Pamirs; and if so, what was the limit of the annexation.

Colonel Yanoff, the Commander, replied that it was perfectly true, that he was annexing the Pamirs on behalf of the Russian Government, and he showed me a map with a given line on it, indicating the limits of the annexation. It embraced considerable pieces of what was clearly Chinese and Afghan territory, and extended to the southern side of the Hindu Kush, to territory under the suzerainty of Kashmir.

When I saw this, I remarked to Colonel Yanoff that they were opening their mouths pretty wide. And he laughed, and said that this was only a beginning—that they would be eating up a lot more later on.

He was quite friendly and asked me to dinner, and we had a very cheerful evening. They were very pleased with themselves because they had crossed the Hindu Kush by the Khora Bhort Pass, had passed along the southern side and gone out again by the Baroghil Pass into Wakhan. I want to draw your special attention to this fact—that an armed party of Russians in 1891 actually crossed the Hindu Kush into the region described by Captain Longstaff this evening.

The next day the Russians left, and I remained in my camp on the Little Pamir, just on the far side of the Khora Bhort Pass.

A few days later, at about eleven o'clock in the evening, I heard a clatter of hoofs outside my tent, and on looking out saw about forty Cossacks drawn up, with six officers and a standard. I recognised Colonel Yanoff, and asked him to come into my tent. He dismounted and with his officers came in, but said he had something very unpleasant to tell me. That morning he had received orders from his Government to turn me out of Russian territory. I replied that that need not disturb him, as I was not on Russian territory. He said he had told me, when we had last met, that the

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Russians had annexed this territory. I acknowledged this, but said that as far as I was concerned I did not recognise it as Russian till I was informed by my own Government that it was. At present I considered it Afghan territory, and as such under British protection. Colonel Yanoff said that anyhow I would have to go. I replied that of course I would, as he had forty soldiers and I had not a single one, but the matter would not end there; it would have to be settled by our Governments. In the meanwhile, he and his officers had better have some supper and something to drink, as they must have had a long day.

They then all sat down and I gave them what food I had, and some wine and whiskey. After a time the Colonel got up and said that it was very disagreeable to him to have to treat me like this—that he saw I was a gentleman, and he would like to treat me as a gentleman. Instead of taking me away by force, he would let me go by myself if I would sign an agreement. He then wrote out an agreement, in which I was to undertake to cross over the eastward range, into Chinese territory—not the southern, into British Indian territory—and was not to return by any of a long list of passes which he named, and which included every known pass.

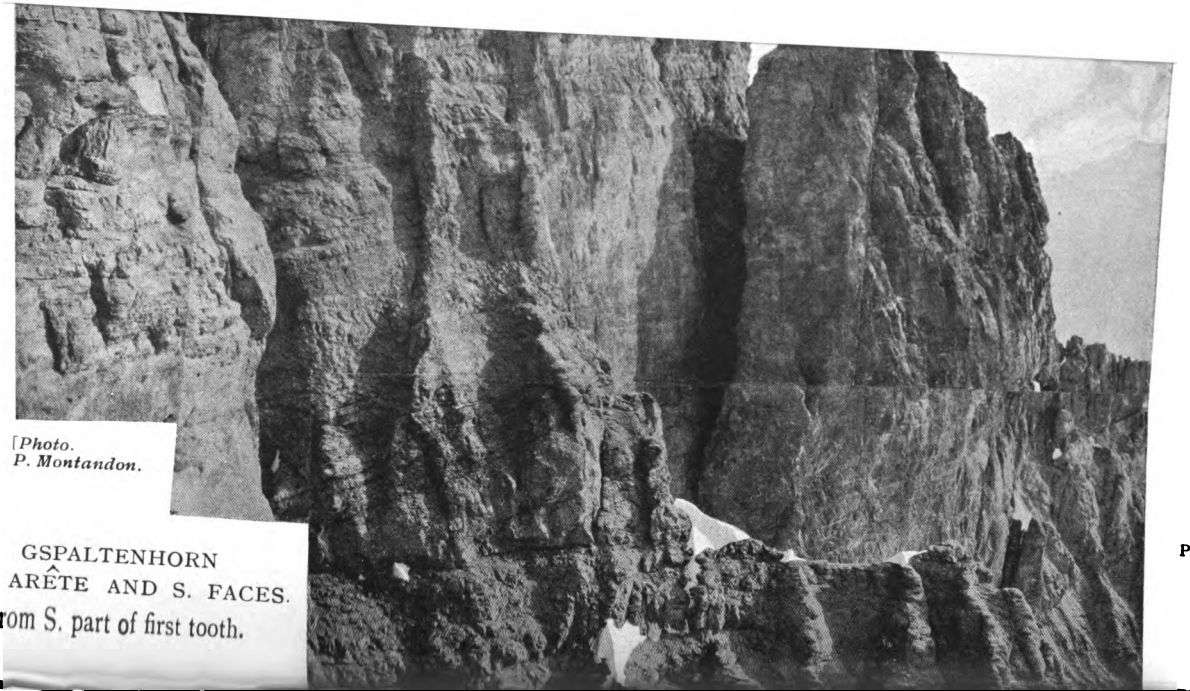
After reading through the draft I asked him to insert the words 'acting under the order of the Russian Government.' He said that there was no necessity. But I argued that, if he was not acting under the orders of the Russian Government, he had no right to be doing what he was; while, if he was acting under their orders, there was no harm in saying so. He thereupon inserted the words, and I signed one copy, which he kept, and I kept another copy myself.

We parted on very good terms, and the next morning I left Bozai Garmbaz on the Little Pamir, where this incident had taken place, and crossed the Wakhijrai Pass onto the Taghdumbash Pamir, which was Chinese territory. There I remained, making enquiries for passes which had *not* been named in the agreement. I wanted to get across the Hindu Kush into the territory described this evening by Captain Longstaff. So I told everyone that I was going to return to India by a pass across the Hindu Kush between the Khora Bhort and the Baroghil passes. Man after man said there was no such pass. At last one man said that it was a very difficult one. Then I had the clue that there *was* one. So I said I knew it was very difficult, but I meant to go by it all the same, and wanted him to come with me. Together we managed to scramble over it—it lies a few miles to the west of the Khora Bhort—and I proceeded to Gilgit and India.

In the meanwhile, on receipt of my report of what had happened, Lord Salisbury had entered a most emphatic protest with the Russian Government, the eventual result of which was that the Russian Ambassador in London had to apologise. He tried to make light of the incident by putting it down to the excess of zeal on the part of an irresponsible frontier officer. But Lord Salisbury drew the

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[*Photo.*
P. Montandon.

GSPALTENHORN
S.W. ARÊTE AND S. FACES.
From S. part of first tooth.

Part of tooth II.

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Ambassador's attention to the fact that the frontier officer was 'acting under the orders of the Russian Government.' He made the Ambassador acknowledge that the act was illegal.

A few months later Lord Salisbury contended that, as the act was illegal, the territory from which I was evicted could not be Russian territory. The Russians had to admit this. So it came about that a thin strip of Afghan territory extends along the northern side of the Hindu Kush, and keeps the Russians from actually touching the passes leading over the great watershed between India and Central Asia.

This is the story of one by-way of the Hindu Kush.

Dr. Longstaff adds:

It would add to the comity of nations if all officers could maintain the same imperturbability of temper as Sir Francis Younghusband displayed under such conditions. I regret that recently, under curiously similar circumstances to those we have just heard about, another officer well-known in the East, when a somewhat similar invitation was extended to him, became quite emotional, exclaiming, 'You haff mobilizt ze mountains against us.'

Some Notes on the South-west or Rothe Zähne Arête of the Gspaltenhorn.

By PAUL MONTANDON.

CLIMBERS are much indebted to Mr. Geoffrey Young and his party for initiating this superb tour, which certainly is one of the most curious and impressive in the Alps. As described in the 'Swiss Jahrbuch' for 1919 and mentioned in 'A.J.' xxxii. 385, Mr. J. Bernet with Jakob Rumpf, guide of Kienthal and guardian of the Gspaltenhorn hut, were the first to follow Mr. Young's steps. They visited on that occasion also the third, most eastern tooth. They reached it from the N. by extremely difficult rocks, and descended on the E., towards the summit of the Gspaltenhorn.

On September 15, 1919, I had the great luck, in company of Bernet and his friend Ulrich, and with Jakob Rumpf, to visit that grand arête. I humbly confess to have gone there with a somewhat palpitating heart. Having incited my enterprizing young friends to repeat the tour, I was at last hoist with my own petard, and had either to submit to be called 'a laggard in love and a dastard in war,' or to start. I had read and re-read Mr. Young's extremely attractive narrative. (How this author enriches the vocabulary of

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Alpine terms with original and highly suggestive expressions!) It touches on every imaginative fibre the true mountaineer may possess. It leaves him no more his own master. Those fierce towers which so often beckoned from afar haunted me in quite a painful manner. To give way, of course, was weakness and folly. When a man like Mr. Young, in the course of his narrative, complains that 'years tell' (who believed him!), one nearly twenty years his senior should stay at home happy in the memories of bygone glorious days. But is not a touch of folly, according to all authorities, necessary to happiness? And we live but once!

Well, on the said day our rather too large and too late party of four, laden with a lot of ropes and two cameras, mounted the great couloir which leads from the N. to the principal S.W. arête of the Gspaltenhorn. Quietly we then followed in the main, and up to the top, the way of the first party. From the first big tooth we 'abseiled' over three or four pitches *direct* down to the next saddle, a slight diversion from Mr. Young's way. *His* last 'abseil' place is seen on my second picture to the right of our own. We then scrambled up to the top of the middle tooth by the *second* fissure to the right of that notch. Low down we had to negotiate an overhanging, difficult place. There the second man should carefully search for the *very highest* possible standpoint where he may serve as pedestal to the leader. There is hardly any hold just above, and Rumpf, who is a very cold-blooded rockman, had this time some difficulty to surmount that obstacle. (Mr. Young wrote to me that his party climbed the *third* chink. This they did not find very difficult, and there was no necessity to stand upon each other.)

The descent from this second tooth was not made by our predecessor's way—which he considers as being certainly the finest and most impressive—but through the *first* small hole, which we enlarged, fixing there a rope ring by means of a piece of wood. On the far side we 'abseiled' over the wall (which at one place hangs over) into the couloir leading down from the next notch to the S. We landed about 10 metres under that col, S. of it, and had no difficulty to reach the gap itself.

The very steep couloir on the N. of the col was ice with very little snow. It falls down into pure wilderness, to unknown depths. There are things in heaven and earth more sympathetic to dream of and to look at. At its top, however, there is a capital 'abseilblock.' Dear old fellow! So we 'abseiled' here once more, this time about 20 metres, to the

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I.



[*Photo. P. Montandon.*

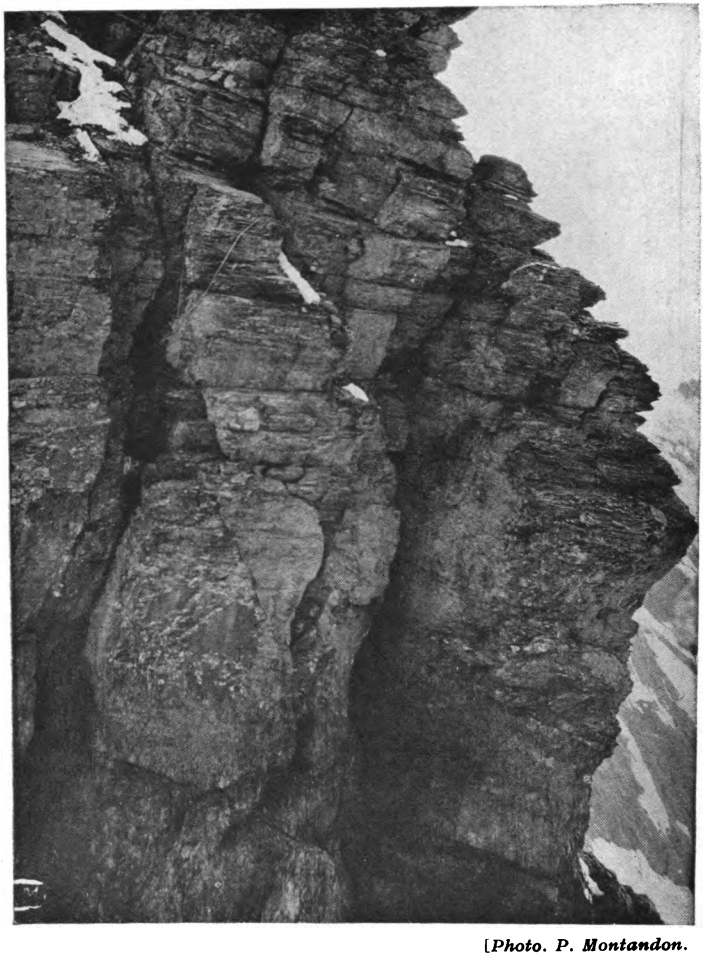
GSPALTENHORN S.W. ARÊTE.

Upper part of first tooth ; total height about 300 feet. From half way up second tooth.

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II. (Fits on to right bottom corner of I.)

Montandon's ropering.



Young's ropering.

[*Photo. P. Montandon.*

GSPALTENHORN S.W. ARÊTE.

The rope-down from first tooth to the next gap.

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foot of a small rocky wall which there interrupts the ice of the couloir. This descent recalls the one, more gentle, from the Pic Central de la Meije. We then cut steps across to the right and rounded the third tooth by Mr. Young's route, as the direct ascent of the tower from the N., by Rumpf and Bernet's rocks, looked awful, and is so. Small but horizontal ledges and a climb up a steep and high couloir with crumbly rocks brought us to the upper foot of tooth No. 3, and from there, over better rocks, to the summit of the Gspaltenhorn.

We took about thirty pictures on that long and memorable day, and I may be allowed to draw a veil over the time we required. It was a record, not on the good side, but it permitted us to have long lasting looks at the beauties of the way. The rock is bad everywhere, and I will incur the risk of hurting Mr. Young's modesty in stating that we again and again wondered at the boldness of thought which made him conceive and undertake this tour (as many others of similar daring) and the determination and strong confidence which induced his party everywhere to draw down their rope after having 'abgeseilt.' The unknown way further on might have been barred. True, since then it has been proved (by Bernet and Glaus, August 1918) that the N. face is practicable, and surely the southern couloirs also should not have offered difficulties unsurmountable to such men as composed the first party. But still . . .

Although there are more 'abseilungen' in the course of this tour than on any other ascent I know of, there is real climbing enough. For me it was hardly ever easy. It is a long and nerve-trying expedition. Great caution is constantly required not to injure one's comrades, who often, far down, stand exactly under you. But the stern grandeur of the scenery fully repays all the efforts. Look at those really formidable towers of the arête and also at those emerging out of the flanks! They are impressive in the extreme. The highest, almost a mountain by itself, stands immediately to the S. of the summit, from which it is separated by a deep and sombre cleft (see photo No. 3). It is well visible from Mürren, from where it seems to form part of the E. arête. Some time will pass until it will be climbed, as also that eastern arête itself, with its slabby gendarmes. A few of my photographs are reproduced here. The nearness and dimensions of the towers make it difficult to get them upon the ground glass. It must be done by sections. If destiny were kind a second time, I should like to re-visit that arête and complete my collection. The view

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of the first tower, as seen from the wall of the second, is something unique. It should be a good deal higher than the Requin as seen from the Col of same name. A visit to the third tower, from above, must also be very interesting. On our day it was much too icy. Jakob Rumpf of Kienthal village, having been there twice, now knows that highway and all its towers and gaps thoroughly. He is sureness itself—careful, serious, and sympathetic in every way. He has great strength and is altogether 'a good man to go tiger-hunting with.' His occupation as guardian of the Gspaltenhorn hut—often overfilled—will prevent him, during the summer, from doing guide-work. But in the beginning of September he is generally free, and so also are then very likely the red, weather-beaten rocks of that great and most astounding Alpine ridge.

Our 1919 Journey.

By GEORGE MALLORY.

(Read before the Alpine Club, May 4, 1920.)

PICTURE four men bounding across Paris in what may be called a super-taxi. An animated discussion was proceeding between three of them, to the complete stupefaction of the fourth, who seemed to regard his companions as eccentrics beyond all hope, perhaps quite insane—but what else could he expect? Above the comical fat face of this bewildered individual immodest capitals in gold round his official cap announced 'Cox's Agency.' His business was to ship the three tourists across Paris. That the gentlemen who had reserved seats in the train to Grenoble should now be arguing as to whether after all they wouldn't take the train to Chamonix—it was impossible, *fantastique*. Nevertheless, the train to Chamonix, when they reached the Gare de Lyon, looked a nice train, and the three resolved to take it.

This irresponsible proceeding which threw to the winds, despite my protests, the deep-laid plans matured during the summer, took place on the evening of July 28, 1919. On the following morning, coming up the valley towards St. Gervais, we were feasting our eyes on snow mountains. It was seven years since I had seen the Alps. To me they were a vision startlingly fresh and new—new as when I first saw them, and

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so overwhelmingly greater than the images I had conjured up that I seemed never to have seen them before. I realised that a thread of experience had been broken. I hardly connected what I saw now with what I had seen before. My mind was void of comparisons and particulars. I was starting again from the threshold; my mind was open like a child's to receive what it could. Whatever we might achieve, and we were wholly without plans, all would be adventure, vivid, surprising, delightful.

But however enchanting this new world seemed to me, I inevitably referred my observations to the intention of climbing peaks. The whole of the Mont Blanc group looked remarkably white; the snow was not of yesterday. The steep side of the Aiguilles was not plastered, but arêtes and ledges were everywhere piled with it; great quantities had peeled off, but elsewhere the even couches were dazzlingly white. Even on the W. side of the valley large patches under the escarpments showed how little the winter snow had melted, and perhaps there was more snow to come now. The upper sky was hazy with fish-like clouds, and lower clouds were blowing up from the S. and gathering upon the summits. The valley was hot and stuffy. We were hardly half-way up the path to Montanvert when a storm appeared to be on the point of bursting; but it was dissipated somehow or another and passed with no more spite than a few casual drops. I emphasise the phenomenon as one typical of the season. Till the middle of August when I left the Alps the weather always appeared to be unsettled; but it was always merciful. A midday haze, rather than cloud, repeatedly obscured the peaks and thickened perceptibly until about the hour of sunset. The nights were commonly much warmer than is usual in fine weather. However, local prophecy was always optimistic and it was always right.

I now come to the sober history of our mountaineering activities. We decided to spend the first day on the Requin. Having regard to the snow there was nothing else to be done—except the Moine, which hadn't a vote.

It is not to be supposed of this party that they said confidently among themselves 'We will do the Requin.' One of us pointed out with admirable fortitude that it would be wholly unreasonable, on a first day, to rise before 6 A.M.; and his determined attitude easily carried the day. Accordingly, a formula was adopted acceptable to all consciences, 'We will go and look at the Requin.'

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The looking took place next day chiefly during the breakfast hour. We had successfully found a way near the Trélaporte side of the glacier, and turned the corner so as to see the farther side of that remarkable arête of which the Requin is the final sentinel before it leaps down towards the Glacier du Géant. The problem which now confronted us, since it was already 8.15 A.M., and the night in any case had been too warm, was to avoid an arduous snow trudge up the Glacier du Plan, which would necessarily be our fate if we followed the usual route. Being quite untempted by Guido Mayer's route (Kurz, p. 174) two courses were open to us; we could either attempt to follow G. W. Young's party (with Joseph Knubel, etc., see Kurz, p. 173), climbing the S. arête in its entirety, or join this arête above its abrupt extremity by working up a small tributary glacier (see Kurz, p. 173). The second alternative was chosen. We ascended in the direction of a well-marked couloir, descending from a point apparently in the middle of the S.E. face of our peak. This face was for the most part clear of snow, for the very good reason that all such superfluities had been shot down its steep wall on to the very slopes where our route lay. The prospects were good enough once we got there. But knee-deep snow on a first day is a formidable obstacle, and when the snow reaches half-way up the thigh —but I won't attempt to describe our agonies. It was about 11.30 A.M. when we took to the rocks on our left above a shoulder where the subsidiary arête to the S. of us, as we mounted the snow, abutted the mountain. Porter led us swiftly on the rocks, and bearing always slightly to the left we reached the S. arête at 12.45 P.M. The prospects at this point were not rosy. It would be unreasonable to allow less than an hour and a half from the Épaule to the summit, and between us and that preliminary goal lay a considerable stretch of rocks, formidable by their steepness and crowned by the Chapeau, a most unpleasant-looking obstacle. Porter apparently was the fittest of the party and capable of much; of Elliott's state no more need be said than that in the secondary contest with his particular enemy, *mal de montagne*, his head, like Henley's, was 'bloody,' but still 'unbowed.' My own physical condition was somewhere between these two. If I could flatter myself in more optimistic moments by computing that in one direction I could do not much less than Porter, I was ready to admit, after anything like a struggle, that I might be capable in the other direction of no less than Elliott.

With our varying estimates of the task before us we pro-

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ceeded at 1.15 to ascend the arête. I confess that I allowed my imagination to suppose that, if all things worked together for our success, we might conceivably reach the Épaule by, say, 2.45, and reach the summit, if we decided to go on, at 4 o'clock, or in any case descend by the usual route to the Glacier du Plan. The arête at all events would present no impassable gendarmes; it was simply the unserrated upper edge of a great tooth slightly inclined, where we were, from the perpendicular. Our pace, however, was not very rapid. It was necessary almost everywhere to climb one at a time, and, if convenient chimneys were found breaking the steep wall, they were not all to be climbed without some consideration, nor, one or two of them, without notable fatigue. My optimistic allowance of time to the épaule must have been almost consumed when we reached the base of the chapeau. Perhaps there was no point in going on. But for my part, I had an invincible desire to reach the crest beyond the Chapeau and look down on the other side. Porter's good nature was willing to gratify my curiosity, and we both counted on Elliott's stout heart. Under these somewhat whimsical circumstances, for it was clear enough now that we could not reach the summit, Porter proceeded to climb a crack in a steep slab, executed a delicate traverse to the right, and somehow managed to convey himself straddle-legged up a smooth edge of granite to a platform. It was a 40-ft. lead of great difficulty, a truly remarkable exploit at that late period in a strenuous first day. Another half-hour of difficult snow and rock work was required to reach the crest.

It was now 3.45 P.M. The Épaule was still half an hour, perhaps an hour, farther along the arête, even had we contemplated a descent on to an unknown glacier. Our course was obvious; we retraced our steps. We were off the rocks at 6.30 P.M., and reached Montanvert with the last light.

. . . . . .

July 31.—It was two days later when we started forth again, this time for the Col du Géant. We had rested luxuriously after our look at the Requin; the mountains at the head of the glacier were still in a dangerous state, as were the Verte and the Dru, and nothing tempted us on that side. But it was thought that we might perhaps accomplish some part of the arête between the Aiguille du Géant and the Calotte de Rochfort.

The walk from Montanvert to the Col du Géant is not an expedition to be lightly undertaken—or not at all events by

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a party still unfit. Above the ice-fall one may expect more labour than excitement, and if he is late there the labour may be excessive. On the other hand, to be there betimes demands a bout of crevasse-leaping in the dark. While so much snow was still unhardened on the glacier, and when the nights were so unsatisfactorily warm, the prospect of a heavy snow grind was a prime consideration. We started, however, no earlier than 3.30 A.M. in the expectation that the first glimmer of daylight would help us up the glacier, and with the hope that we might yet be early enough to find hard snow above the ice-fall. Our calculation was justified on the first head; when we found ourselves about 4.30 A.M. happily past the corner, in the middle of the glacier and approaching the ice-fall, we were well satisfied with our performance. But what were the prospects: we were walking on snow, firm enough it is true; but where was the crisp suggestion of frost? Allowing for a colder temperature higher up we could still be certain, if we followed the usual route, that we should trudge soft snow in plenty.

I hope that it was more in adventure than in laziness that we resolved to circumvent what Nature proposed. It was a favourable occasion to try experiments on a glacier, and the E. side of the ice-fall was not uninviting, by reason of a plausible trough which separates the more broken part of it from the lower rocks of La Noire. There was everything to be gained by this course if it would go; the W.-facing slopes above and beyond would be little affected by the sun, if we could but reach them soon enough, and we should have a shorter line to the Col du Géant. Those who are confronted by the deep blue sea turn to the Devil and hope for the best. Such was our optimism on the present occasion. The Devil at least is as an unknown quantity; his lure is caprice and he may make a mistake.

To describe in detail the sequel to our decision is a task which I trust will not be expected of me. Of all the mountaineering adversaries which a mountaineer may meet, the most surprising, resourceful, attractive, the gamest when he chooses to fight, is, beyond question, a big glacier. But the contest is indescribable. A climber who takes a short cut on a glacier can but look at his watch and count the lost hours. I can only relate of this adventure that our experiences were not unusual. We did not on the frail edge of some blue cold pinnacle, too elegant to be sound, run the risk of being engulfed along with it. Nor did we hew steps tediously up any per-

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pendicular wall of formidable dimensions. But the way was exciting enough—first on the right of the trough, then in the middle of it, and finally across a bergschrund to a little snow slope under the rocks till we leaped from the ultimate tongue of La Noire to the white fields beyond. Here the crust would hardly bear us; we became full of devices to float upon it; we took quick little steps, we leaned upon our axes, we dug in our toes and crooked knees towards the slope, or painfully walked with boot soles turned out to press the thrust along the surface. At times we positively went upon all fours, the ubiquitous ice-axe playing spar to the shipwrecked. I believe we must have tried every manner of going that is swifter for a biped than to go upon his belly. Anything we found was better than to go through; in treading delicately we could have given lessons to Agag. The sun was always chasing us—a bright menace—and we fled like bats, remained almost constantly in shadow, and almost never floundered. It was not altogether a straight line that we followed, but it seemed as we went miraculously direct. The slope was such that for the best part of the distance we never could obtain a clear view ahead; the choice of line was speculative in the extreme. We had no knowledge as to where the crevasses lay; we could only guess. But though the crevasses, when we found them, were perturbingly immense, the Fates were always kind; some chasms which seemed to cut us off completely were found to be choked with helpful snow, others were cunningly bridged by frail arches of ice or just not too wide for a judicious leap. It was exciting, exhilarating, and sometimes hard work. Little time was lost. We met the tracks from the other side not far from Le Petit Flambeau and reached the Col about midday, sufficiently weary and contentedly elate, as all should be who have avoided irksome labour and yet achieved their object.

August 1.—The next episode which I have to record is the saddest event short of disaster that can well happen to a party of mountaineers. From the moment that Elliott first mooted the proposal that we should come to Chamonix at once instead of Dauphiné an apprehension had always been present in our minds—that Elliott's knee would stop obstinately in the way like Balaam's ass. To criticise the vagaries of this remarkable joint would be unbecoming in anyone but its possessor. Suffice it to say, that for Alpine labour it has been usually brought to a benevolent disposition by a careful course of previous suggestion. But the couloirs

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of a government office during the summer months last year had contrariwise been a training in idleness. By the completion of our first expeditions it was brought to a state of open rebellion. It jibbed on the Requin, it creaked on the Glacier du Géant, and now was groaning vigorously on the Col. By evening it was evident that it refused to be cajoled. Elliott, who alone could gauge his hurt, told us plainly what it meant. At the least a week's complete rest was needed to restore his knee; it was unlikely to be fit even then for serious climbing. The only wisdom was to return to England at once.

It was a strange contrast next morning on that little high plateau so splendidly set, between the clear, vivid, hopeful, dawn calmly glorifying the peaks—a perfect morning on the one hand—and on the other a despairing party, setting forth not to win new summits, but to reach Montanvert in time for *déjeuner* and the train for Chamonix. We pottered for a time along the arête leading to La Tour Ronde to see the unparalleled beauty of Mont Blanc, and then mournfully, and very painfully I fear for Elliott, followed the tracks down the glacier.

The Trélaporte face of the Charmoz had attracted our attention on the way to the Col du Géant. I had wondered where exactly Joseph Pollinger had led his party so long ago as 1899. It was pointed out that wherever it was the route had been damned by Kurz as 'une des plus pierreuses.' But this judgment I found incredible. Why should any place on that excessively steep face of hard granite be exposed to abnormal danger from falling stones? Stones might have fallen on the day of Pollinger's ascent, but were stones constantly falling there, or more frequently than in a hundred other places, on routes sanctified by venerable names and the common usage of climbers, where rocks were far more brittle and more disintegrated? The only way, we had agreed, to resolve this perplexity was to go and see. 'And why not?' I said to myself as I mounted the path. 'If ever two men are a better party than three it is on a steep rock face. And if we succeed we shall get a bit of our own back.'

When it happens to him who bears the lantern that he loses his balance irrecoverably, with the result that the lantern is dashed against a rock and extinguished while the palm of his hand receives an ugly gash—when ruffled by one or two such small adventures it is difficult to believe that all is going well. Accordingly, my mood on the morning of August 2, as

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we contoured the lower slopes of the E. arête of the Charmoz, was not perfectly optimistic. My right hand though sore enough was still serviceable, but I regretted a portion of skin unfortunately removed from an important finger-tip. Porter had already been critical of my lead, in his gentle manner (probably with justice); I was supposed to be conducting the party by the light of previous experience, and I was particularly anxious to find a good way. But our line was evidently too high; we became involved with difficult rocks, and were forced to struggle up a most unpleasant pitch when we ought to have been walking on easy ledges. The Glacier de Trélaporte presented no difficulties when we reached it, but it was annoying to observe that we should have done much better to make for an obvious notch only a few feet above it by ascending a snow couloir on the other side. It was annoying, too, that the slope was just so steep that it was necessary to chip steps for some distance up the glacier. We sat down at length for breakfast about 5.40 A.M. on some rocks immediately below the bergschrund, not much later than I had expected. But it still seemed a vaguely unsatisfactory expedition when we went on again. We were lucky to find the bergschrund passable at the right-hand corner. I remembered that G. W. Young's party, when they climbed the Grépon, had some difficulty at this point. But generally speaking, difficulties were not to be expected on this lower part. We were following the line towards the conspicuous Red Tower followed by all previous parties on this face. I had once been so far as that level myself and remembered no formidable obstacle. However, we soon found ourselves cutting steps above the bergschrund towards the rocks away on our left with no little labour, on account of three deep grooves whose sides were both steep and hard. We took fifty minutes from our breakfast place to the rocks. Hereabouts I knew that one should traverse away to the left; but the slab which presented itself for this purpose looked singularly uninviting. I wasted twenty minutes climbing a steep wall, and defeated here, attacked the slab below; the roughness of the rock made it an easier passage than it looked. We proceeded without hesitation after this, bearing slightly to the left, until we found ourselves at a corner where a buttress abuts a wall; we were separated from some chimneys away on our right by a patch of deep snow. The obvious plan was to make at once for these chimneys, as Porter recommended. But my judgment was affected by vague

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recollections. I was tempted to make a reconnaissance in the other direction, and there unfortunately I saw sitting on a ledge a large friendly cairn. I became possessed of the obstinate conviction that the wall above should be climbed and not the chimneys. Two somewhat desperate and futile attempts led to further waste of time, until eventually we crossed to the chimneys, which were found to go easily enough and led to the bay, a marked feature of the mountain, at the level of the Red Tower. It was now 8.30 A.M. Porter, who was carrying most of our burden, had been wonderfully patient behind an errant leader. But I was ill-satisfied. There had been no fizz about our performance, and while one may forgive hesitations and futilities when the obstacles are really formidable, he desires the preliminaries of an expedition such as this to go with a click.

From the point we had now reached much could be seen. The face of the Grépon presented its grim bare slabs in continuation of the line we had followed. Away to the right, on the other side of the bay, were the S.-facing rocks of the Charmoz E. arête, and most conspicuously the Aiguille de la République. The nick behind this elegant spike offers no attractions as a line of attack for the Charmoz. The problem is to reach the arête, where it assumes a comparatively horizontal habit above this step. The topography of all the country which now lay within our immediate view was related as we saw it to one central feature, a couloir of which the origin was concealed, but which descended towards us, apparently from the direction of the Charmoz; the Grépon was its true right wall in this lower part. Its true left wall was a conspicuous rib, a high buttress of the arête in question and leading exactly to the point which we wanted to gain above the Aiguille de la République.

Our objective, therefore, was perfectly clear, and we had little doubt that it had also been Pollinger's. The only doubt remaining was how and where to join our rib. Its extremity was a forbidding red wall, perhaps a hundred metres above us. The gully might prove the best way round, and at all events deserved inspection. Not many minutes were spent in determining our plan before we moved upwards again, on smooth but broken plaques. It became evident as we approached the gully that its condition, if not its nature, was sufficiently repulsive; we had no wish to contend against a vigorous young torrent in a smooth open groove, nor to go up where whatever was so inclined would be coming down—

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not unless we were obliged. A convenient traverse led back to the right of the red wall above us, and we halted twenty minutes for a prune and a pipe. The next two hundred feet contained no obstacle of supreme difficulty; but with snow on sloping ledges and an angle that permitted no liberties it was an exacting pitch, and we found the hour 10.30 A.M. when we reached the narrow crest of our rib above its first formidable obstacle.

It is idle perhaps to analyse those swift changes of mood or sensation which are the common experience of mountaineers. They may come to us at any time through some incident in our adventure, through altering circumstances of our progress, or merely from the fact of a halt when we come together and review our situation.

We paused only, and looked upwards; and I became aware that the whole face of things, for me at all events, had completely changed. I saw by Porter's expression that it had changed for him too. His smile had too much enjoyment to be grim, and was too serious for mere amusement. We looked up at the ferocious crags, and felt, I imagine, as a hunter feels when he gets sight of his tiger. I have in mind an optimistic hunter; for we were certainly elated. And yet we had not too much to be happy about. In four hours we had made perhaps 1500 ft. from the bergschrund. We computed nearly as much again to the summit, and the great difficulties were all in front of us.

A few steps above us the buttress was notched, before rising again in an obstacle no less abrupt than the red wall which we had outflanked. We turned towards the gully and found a chimney. It was necessary to push up through a hole behind a chockstone—a tiring struggle, because the hole was iced, and while cutting out a way much care had to be taken to avoid bringing down too large a flake. From the shallow cave above the chockstone direct progress was strictly barred. The left wall offered the only hope. Luckily it was possible for the second to give a shoulder, so that the leader could be thrust over the edge on to a sloping slab above. It was an unpleasant position standing there with no particular handhold, but for the encouragement of an excellent belay. A minute crack running vertically up the slab alone seemed to break its even surface. Luckily the point of the axe could be inserted; by turning the shaft over to the left and keeping the point pressed in it could be sufficiently secured; the left hand in this way did the required pulling, while the right

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fingers prevented a slip. Without an axe it would have been impossible to get up this slab, in height about 20 ft. The second dexterously availed himself of a stirrup-rope, which was just long enough to be within his grasp for the first struggle. We were still, as it were, in the middle of a pitch, but there was now a choice of alternative routes, of which the leader chose the worse. After ascending vertical flakes he had again to surmount a difficult slab when some distance above support. The second bore his burden up a chimney having a less malicious disposition, which proved moderately tractable after a difficult start.

My next recollection after these salient events, which I see quite clearly engraved in my mind with the familiar characters of nervous tension, is of issuing from some sort of groove which we had followed without difficulty above the chimney last mentioned. We now found ourselves once again on the crest of our buttress, followed a ledge to the right, and saw above us on this side a deeply-cut chimney, or subsidiary gully it might almost be called. Beyond the fact that we accepted what was offered with grateful hearts and some little show of enthusiasm, neither Porter nor myself could recall even a few hours later precisely what happened next. We agreed that it was, like Prospero's island, a wholesome place, where the air breathed upon us sweetly; the rocks were steep and sound as one could wish to find them; the wedged axe was useful more than once, and strenuous but not desperate exertion was required. Buoyed by confidence in Nature which had been so kind to us, happy, optimistic, we proceeded swiftly for about 200 ft. Even the final pitch, partially iced, a steep wall with very small holes—a difficulty we reckoned of the first order—detained us only for a few minutes, and when at 1.15 we gained a platform once more on the edge of the rib we were now proud of our progress. Here we halted for lunch.

The reflections engendered on this high perch were for the most part comforting: but two little doubts cast perceptible shadows. The sky was clouding over and mist was gathering about the peaks. A sphinx, presumably one of the Charmoz summits, could be discerned, when we looked round the corner of the gully, coldly regarding us; but suddenly we could no longer see it. Neither of us much believed, after the past few days, in the malice of this omen. But even an innocent mist was undesirable if we were to find our way down by a route unknown to us. The second doubt was perhaps more

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serious. Kurz's account of Pollinger's ascent makes mention of a 6–7 metre chimney. Why then was nothing said of the remarkable chimney we had just come up? Could 6–7 be a misprint for 60–70? Such an explanation was far from satisfying us. Had Pollinger, in fact, ever been where we were? Kurz said not even so much as that this party had ascended a steep buttress; on the contrary, he spoke of a gully. The more one thought about it, the more clear it became that we had not followed the line of the first ascent. Whatever peace of mind may be drawn from the assurance that a man has been there before you could be ours no longer. What lay between us and our goal? And would it go? We judged that the distance could not now be great. We should soon know the issue. Such thoughts if they gave ground for some anxiety were chiefly exhilarating, entirely undepressing, and served, as did the sombre shadow of a cloud, to hasten our steps.

Immediately above us the rocks sloped back more gently than before. My pipe was scarcely well alight when we went on straight ahead. We had proceeded perhaps 150 ft. when I knocked it sideways against a rock and out of my mouth; it slithered down snow, past Porter, apparently doomed; and then by some miraculous good fortune turned a somersault, took a header, and stopped. Porter, roused to sympathy by my cry of anguish, made no hesitation in unroping himself and quickly recovered my precious pipe. It was a good omen, but also a warning. The rocks were getting steeper—steeper than they had appeared from our luncheon place—and a little higher I now saw were probably impracticable. We chose the obvious alternative, and mounted snow on our right into a gully continuing our previous line. The first pitch pulled us up. We had reckoned with rocks but not with ice, and I feared delay. It was necessary to set to work with the axe, chipping awkwardly with the left hand from a strained position. The issue hung on one small step cut in the frailest imaginable structure just clinging to the rock. From this it was necessary somehow to pull oneself over the awkward bulge above it. The obstacle was the most obstinate we had yet encountered—the sort where a man sticks and decides that he can't, but, knowing he must, continues wriggling till he does.

We came forth finally from this second story of our great chimney or little gully to find a change of circumstances, showing that the end was near. The buttress had narrowed almost

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to a knife-edge, as a good buttress should, before the point of abutment. Its structure was becoming fantastic, and even was showing a dangerous tendency to indulge in superfluous ornament. Some curiously devised overhangs and angular projections in the first 20 ft. above a narrow gap invited strange contortions in the climber; but we were too excited to contort ourselves for long; this obstacle was carried with a rush—in so far as that expression may be suitable to the balanced performances of mountaineers. We quickly mounted the beast's back beyond in the expectation of seeing the end. We were not, in one respect, disappointed. Whatever we saw was probably the last of its kind, and it appeared to mark the limit of our day's adventure. Separated from us by a square-cut gap was a gendarme about 100 ft. high—it was no fantastic shape prancing upon the edge of space, but a solemn and utterly forbidding sentry with his back to the wall. We were faced by an obstacle unassailable. On the right vicious slabs swept down to the Aiguille de la République; by traversing across the head of them it might be possible to reach a farther wall apparently near the junction of the buttress with the arête. Porter thought this quite without hope; it could be the hope only of desperate men. It seemed to me just conceivable that a way might be found on that side, but the demand of nerve and strength would obviously be so great that I doubted whether we should be justified in launching the assault at so late a stage in our day's hard work. To the left the situation appeared still more hopeless. The gully on that side had now opened into a bay; towards this the rocks fell away with appalling steepness, while the tower itself capped the precipice with an overhang. And beyond this, on the arête of the Charmoz, now so near, I noted a perpendicular wall some 30 ft. high, which might be impassable should we gain the arête.

With all my optimism blown away like smoke I climbed down into the gap, and proceeded to traverse carefully to the left side towards the overhang. At least, I thought, I will look round the corner. My curiosity was gratified by a ray of hope. Here was a little bay perched above the precipice; it might be possible to get up the farther side of it. The entrance was difficult, but I managed to crawl under the overhang and land my knees on to a sloping slab. On the farther side I climbed in a corner up to a mantelshelf on my left. Above this was a short wall. It was evidently very difficult, and I couldn't tell whether it would go. I sent back a

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depressing account to Porter. My confidence was at a low ebb, but his reply showed that he possessed, or he assumed, the glorious gift of blind faith. It was necessary in any case for him to move, for I should want more rope if I was to make the attempt. Happily I was able to take up a position so as to press him inwards as he passed the overhang, and help his arrival on to the sloping slab which the rucksack might otherwise have rendered extremely awkward; and by similar means I calculated we should be able to return. On the farther side of the recess was a patch of snow. Here Porter drove in his axe. It was not a sufficient protection, but it might serve, and it was the best available. If he had wavered at this point I doubt if I could have tackled the pitch. I mounted again in the right-angled corner and traversed out leftwards on to the mantelshelf. I was now almost directly above my second, and above me was a wall as nearly as possible perpendicular—a short obstacle—only some 15 to 20 ft. high, but, I confess, an alarming one. I was conscious during a few seconds' hesitation of confused reflections, proceeding from the thought that but a short time before I had been in the mood to tackle such a pitch with a gesture of confident enjoyment, with the *élan* of a leader leading to victory. Now it was different; the spirit was unwilling. Was the flesh any weaker for that, I wondered, or if more effort of will is required to start, is there less effort available to get up? . . . I looked down with a backward, uncomfortable glance, to see Porter in the most workmanlike fashion belaying the rope round his axe in which neither of us felt security. I positively disliked him for his imperturbability. Still, there he was, imperturbable, efficiently cheerful, a moral fact from which I saw no escape. I looked away from him, half in anger that he should combine so much genial amiability—more than usual—and so much veteran's righteousness round his damned belay; half in sorrow that any such fool could be found as to enjoy, apparently, our present situation; and at the same time, as I looked upward again, in some further strata of consciousness I was amusedly delighted that Porter was playing the game so well.

As to the difficulty of what followed I feel singularly incompetent to pronounce judgment. The steep little wall was climbed, safely, as it had to be; but the fingerholds seemed distressingly small, and it was necessary to change feet on a minute foothold. Balance, no doubt, was chiefly required; perhaps it was not a particularly difficult pitch.

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Porter followed more easily than I had expected. However, my memory is left with the picture of a short intense effort of mind and body in a situation as exposed as I care for.

I had imagined once this wall was climbed that we should find a way up, one way or another, on this side of our arête, and I was disappointed after ascending a few feet higher to perceive that we could not proceed in that line. Porter, however, made a good lead up to the right, and by means of a slanting crack rejoined the arête. The great obstacle had been surmounted, but we withheld our cheers. Our hopes were not yet certainty. I had to take a shoulder to mount the next step in the arête, raced up 50 ft., crossed a gendarme, reached a farther point, and then shouted to Harold to follow. As he came up stepping off his axe and by some ingenuity recovering it, I was seated on the final pinnacle, duly placed to crown our buttress, and looking away over the arête and down to friendly Montanvert.

We were now divided from the summit ridge of the Charmoz by a sharp snow arête interspersed by a few rocky obstacles. With feet dug in on the Montanvert side and arms over the crest, we worked quickly along to the first of these, the perpendicular wall I had already remarked. It was easily surmounted and our way was plain before us. The mountain no longer resisted; the day was ours. At 3.45 P.M. we joined the summit ridge.

The weather luckily had not been unkind. Cloud was blowing on and off our peak; but not so as to enshroud us thickly. And in any case we could have followed tracks in snow, as we soon proceeded to do. An uneventful descent took us back to our abode at the due hour, in time for dinner.

A few words must be added in retrospect about our climb on the Charmoz. For persons hardly fit and certainly not yet hard it was a sufficiently strenuous day. But it was a proper expedition for two guideless climbers. They simply rubbed their noses against the rocks, and if they could not have climbed these rocks safely they would have retired. The only risks taken were in descending by the usual way, over the Nantillons Glacier. The ascent was never exposed to falling stones. A third man would necessarily have caused delay at several places, and a party of more than two will never, I expect, have much time to spare on this route. It is true that we wasted about 45 minutes below the Red Tower, and it would have been possible to have saved the 20 minutes' halt which we took at 9.30. Possibly the presence of ice in several places

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cost us another 45 minutes, but we were early on the glacier, and I don't think our pace was slow; from the time we reached the bottom of the long chimney, and particularly after lunch, it was as fast as I have ever travelled on difficult rocks. We had time to spare no doubt for the descent. Personally, I have a respect for the Nantillons Glacier. I would always like to pass the séracs before sunset—after the westerly sun has done its worst and before the critical hour or so when frost sets in for the night.

I have described this expedition at some length for purely literary reasons. It is possible to indicate the nature of an expedition quite briefly. But I confess I have not the art of making a story without some details, and to make a story seemed the best chance of interesting you.

The incidents of rock-climbing usually afford more material for description than hours spent on snow and ice; there are notable exceptions, such as Mummery's ascent of the Col du Lion and our late President's ascent of Mont Blanc by the Peuteret arête; but I think it will generally be found that much more ink has been used in describing difficulties on rocks than those on ice and snow. From my point of view this is regrettable. For the best that climbing can give us, variety is needed; but ice and snow seem to me to afford finer experiences than rocks. I should be inclined to accept as an expression of the first mountaineering instinct Shelley's simple words, 'I love snow and all the radiant forms of Frost.' I don't love an Alpine peak devoid of snow. I hate the Dolomites, for instance, though I have never seen them, for their sterile aridity which no photograph can conceal; they seem to me an unquiet sort of desert. I envy no mountaineer so much as those who made the Brenva ascent when it was still comparatively safe; and it seems paradoxical that I should have been at pains to describe an expedition that contains so little of what I consider the finer element.

This attitude may seem ungenerous. But I don't deny the delights of the Charmoz, and I hope I am grateful for them. The Aiguilles are deservedly attractive. They have an indefinable quality of good breeding. Fishermen say of the salmon, I am told, that he is a gentleman—he refuses to give himself meekly away; he plays up till the last; he has the quality. The Aiguilles are not so much gentlemen as ladies. Porter and I were agreed that our Aiguille behaved with admirable spirit.

To complete the tale I set forth to tell I have still to make reference to two expeditions, though I shall not describe them.

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Interest in the nature of our enjoyment of the Alps is concerned not only with particular peaks, but with the campaign as a whole. To those who find themselves in Chamonix wishing to be on the Col du Géant, it may seem desirable for the sake of the campaign to take a peak on the way ; or they may merely wish to avoid repetition of a snow trudge they know too well. The latter was our case, and we planned to reach the Col du Géant, excluding the greater part of a toilsome walk by traversing the Aiguille du Midi from the Plan de l'Aiguille. It was perhaps mere laziness, but the enterprise was not without point, for it appeared from Kurz that no satisfactory ascent of the Midi had been made on this side. So far as I know only two parties have recorded expeditions here—the first, Mr. Dent's party in 1899 reached the N.E. arête in bad weather, and descended hastily on the far side without reaching the summit rocks ; at all events they made the first ascent of this face. The second party, Mdlle. Engster with a guide and two porters, were less successful.

Both parties used the great couloir which comes down from near the summit. Whether this was altogether a wise proceeding I have not sufficient knowledge to judge. One would certainly expect it to be a safe line of ascent in normal conditions, but to descend it late in the day when the sun has come round (it faces W.) is a very different proposition, and a party ascending this face must reckon with the possibility of defeat higher up, where the cutting might be very arduous or either of two obstacles impassable.

The line chosen by Porter and myself is to the left of this one all the way.[1] Crampons were used in the couloir—we should have required steps without them. The rocks in the middle section were easy. The general angle of the hanging glacier and snow slopes above is decidedly steep. We kept to the edge as far as possible, and thus avoided any slopes of bare ice on either hand. There were difficulties in only two places, firstly, in crossing the bergschrund, which appeared possible at only one point. It was necessary to get up a crack in an ice-wall. Secondly, where the final ice-wall meets the rocks, which were partially iced. This proved extremely difficult.

It was late, 12.15, when we reached the top of this peak, and the weather looked really bad. Nevertheless, I have little doubt we committed an error of judgment in deciding to descend to Montanvert ; various considerations came in ; we reckoned

[1] *V.* p. 131 for sketch.

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we shouldn't be fit for a long climb next day, and at the hotel we should find letters. In any case we took the wrong line, though it was also Mr. Dent's, making for the Rognon, near the ice-fall of the Géant Glacier. It was a very laborious descent in deep soft snow till we reached the tracks on the Glacier de Plan coming from the Requin.

We found ourselves eventually at the Rifugio Torino contemplating a reconnaissance on Mont Blanc. I was not happy about the prospects, and found myself awake at intervals during the night going over again in my mind the arguments for and against this expedition. Was it really a suitable expedition for a party of two? And for this party? And there constantly recurred the vision of a certain bleak edge of snow, or it might be ice, where we had seen powdered snow whisked in a fierce tourbillon such as might blow a party off the mountain. The wind was moaning during the night, and was still unquiet when we were called. Porter exhibited a tendency to wait for more propitious signs. But an interval of silence was followed by gentle snoring, and it was impossible to believe his judgment to proceed from a clear, unbiased mental process. The question as to whether we ought to start became involved in another —what would be good for Harold? The urgency of moral suasion was now applied.

A little later we were treading the steps up to the Col by lantern light. We had hardly popped our noses above the rim when we were furiously assaulted by an unseen enemy, whose first act of violence was to blow out our candle. You may remember that there is a hut less glorious than the Rifugio Torino situated at the level of the Col. Its emptiness was slightly cheered at that early hour before the dawn, by two pipes peacefully smoked and a conversation dim, solemn and fragmentary. The barbarian invasion, as it seemed, of Italy from the north did not cease; the hordes swept shuddering over the pass or fled screaming round the crags; and another project was born into the world. Below at the Rifugio two other Englishmen were presumably stirring towards resolved activities which they might already be half regretting. It was a favourable moment to try suggestion.

As a sequel to this thought four men—the two others were Professor Pigou and Mr. McLean—after lingering just so long as to know from its magic touch on peak after peak that the old fire was still alive, jogged down the steep path on the Italian side. Two of them at least had no passports, and to the interest of outwitting tracks on a moraine was to be added

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that of outwitting the gendarmerie. It was this thought, and the liberal advice of the inhabitants, when we were sitting in the shade at Purtud, after eating a breakfast worthy of that green oasis, that drove us from the alternative of passing there a day and a night. Those who have spent a hot summer's day, as hot as an August day can be—and have not started very early—in walking first up the Val Veni, and, farther, up the Miage Glacier, will appreciate the moral worth of our resolution. But I must admit that I found it a most enjoyable walk, and it was ultimately enlivened by circumstances which will remain unforgettable. Later in the afternoon of this same day the same four men might have been observed cutting steps up the Glacier du Mont Blanc on their way to the Quintino Sella hut, and with them, curiously enough, a fifth member to their party—a singularly passive member from all appearances, for he was frequently left sitting upon any convenient ledge and thereafter hauled up another stage, let down into a crevasse with a sickening swing, to be hoisted out on the farther side, and eventually pitched and pulled at the same time off the glacier altogether on to *terra firma*. This hapless personage was no less a burden than four small logs tied together at the end of our spare rope. The ascent to the Quintino Sella hut is steep—I doubt if any ascent to a hut is steeper; and the four weavers' beams arrived there that evening the least exhausted members of their party. There was wood enough already at the hut, as Professor Pigou had foretold; but his was merely that cynicism about the world as we find it which is born of present discomfort; the true critic might have asked what sort of a job it would be cutting and splitting those little logs for a fire, and how it might agree with the only tool available, the somebody's ice-axe, which must never be mine.

On the following day we traversed Mont Blanc. We did not find it a difficult ascent—following, I imagine, more or less closely the line first chosen by Mr. Kennedy. But it has rarely, if ever, been my fortune to spend a more agreeable day on the Alps—a day more than agreeable, a satisfying day. It is not altogether easy to account for this feeling. In the ordinary way I find a close correspondence between the intensity of the struggle and the keenness of enjoyment. In this case the real struggle had taken place on the previous day; in so far as mountaineering qualities were required for this expedition they were required chiefly for the ascent to the hut. Perhaps this fact was partially responsible for our enjoyment. The second day was a long, unchecked, and glorious reward for

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the first. Is there any other mountain, I wonder, where the first day counts for so much? I call to mind the approaches to various huts; and how few are worth recalling for any interest in their unpleasantness! Another cause suggests itself as contributing to this day's enjoyment. The companionship of tried friends on the mountains is undoubtedly a blessing: but the converse is not true—that of untried friends need not always be a curse. A care for the brotherly relation has its uses, we are all agreed, in the mountaineering fraternity, but the discovery of a brother in the mountaineer can hardly be so interesting elsewhere, or so delightful, as upon the mountain side.

There is a further delight which I connect with this last expedition of my climbing season. The tentative advances and temporary defeats, hesitations and delays, linked together by a continuous persistence where the way is intricate and success is withheld for weary hours, or perhaps in the final decision—all that is a wonderful experience, and perhaps we like ourselves best for the efforts and endurance which the resistance of a great mountain demands. But easier successes have also their joys, and not the least of these is the mere rhythm of motion, the smooth, unchecked, harmonious advance of a party, where a great mountain offers from its abundance an infinite variety; though no remarkable skill may be required to surmount the obstacles, no little skill may be used to preserve that harmony, to achieve that intimate combination between the members of a party which is itself not only the most important of means, but a sufficient end and a sufficient delight.

And, finally, is not an ascent of Mont Blanc under any circumstances supremely satisfying? Or is this merely a hymn of praise to my mistress? I confess I have never walked up to the summit from the Grands Mulets; but I should be far from despising such an enterprise. A great mountain is always greater than we know: it has mysteries, surprises, hidden purposes; it holds always something in store for us. One need not go far to learn that Mont Blanc is *capable de tout.* It has greatness beyond our guessing—genius, if you like—that indefinable something about a mountain to which we know but one response, the spirit of adventure.

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The First Ascent of the French or North Face of the Col de Bionnassay.

By R. W. LLOYD.

(Read before the Alpine Club, June 1, 1920.)

THE climb I have to describe to you is the first ascent of the north (or French) face of the Col de Bionnassay. This col is probably well known to many of you by sight, and one might almost term it the most imposing maiden col in the Mont Blanc range.

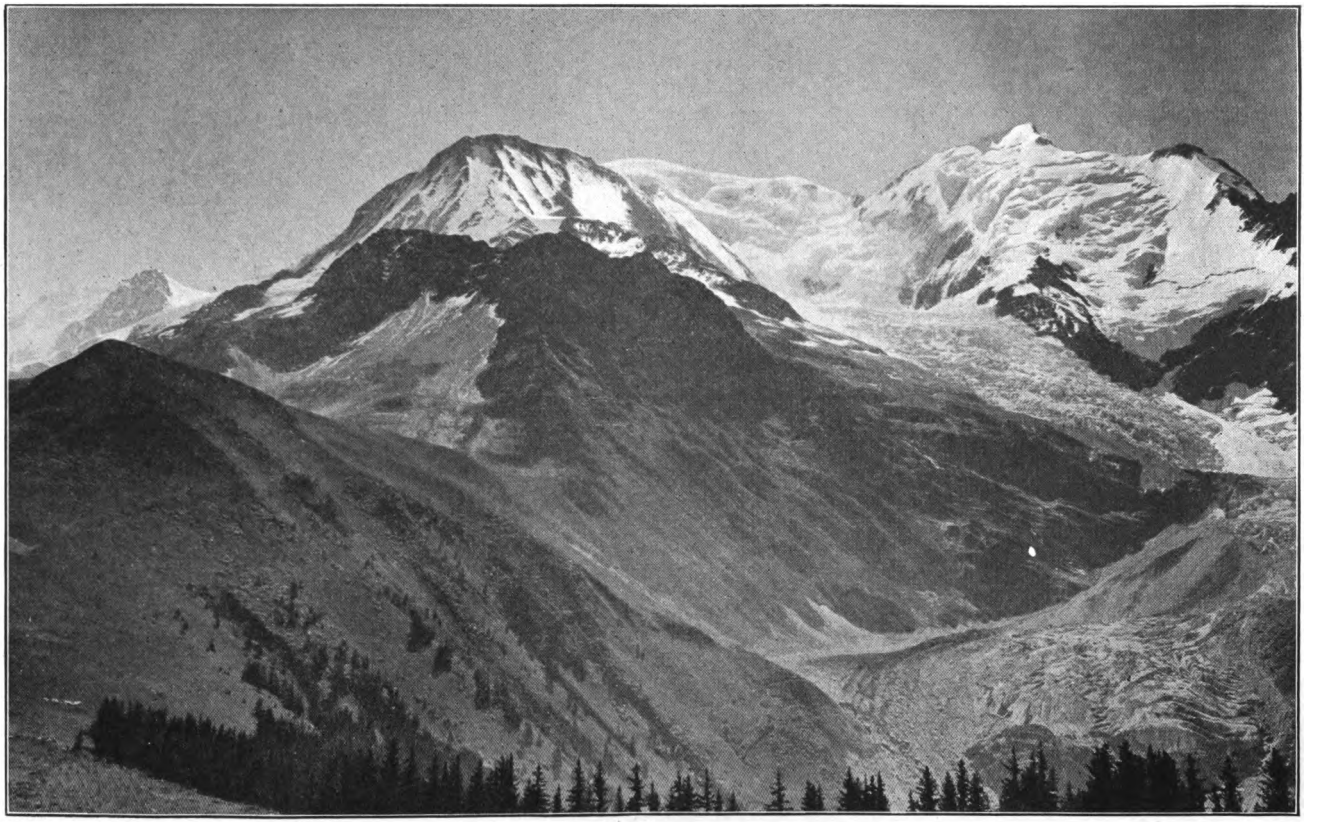
The view of it from the Hôtel Bellevue on the Col de Voza is superb and impresses one with the grandeur of the immense mass of snow and ice that makes up that face of the col. I formed the idea of this climb when going to the Tête Rousse Cabane en route for Mt. Blanc in July 1909. On broaching the subject to Joseph Pollinger he told me that Sir Edward Davidson had long had the climb in view and intended to try it at the first favourable opportunity. It was in fine condition so early in 1909, and the Bergschrund looked somewhat easier than I have since seen it. In the circumstances of course we decided to leave it, but last summer Sir Edward kindly urged me to attempt the climb and gave me his views as to the advisable line, which we afterwards found to agree remarkably well with our actual experience. I accordingly went out to Chamonix last summer, determined to put matters to the test.

I arrived at Chamonix on August 2, 1919, staying of course *chez Couttet*, where Joseph joined me. Being badly out of condition, for several days I took more or less painful walks up and down the paths to La Flégère, etc., etc. We slept at Montanvert on the 6th, traversing on Friday the 7th the Aiguille du Tacul, which at that date carried much snow like the rest of the Mt. Blanc chain. This is a very pleasant climb to start with and I found it did me a great deal of good. Before we left for the climb, Joseph, with a misguided confidence in the French post, *wrote* for his son, Adolph, to join us on the Sunday.

The fine weather continued and we looked forward to a start for the Col de Bionnassay on Sunday. However, Sunday

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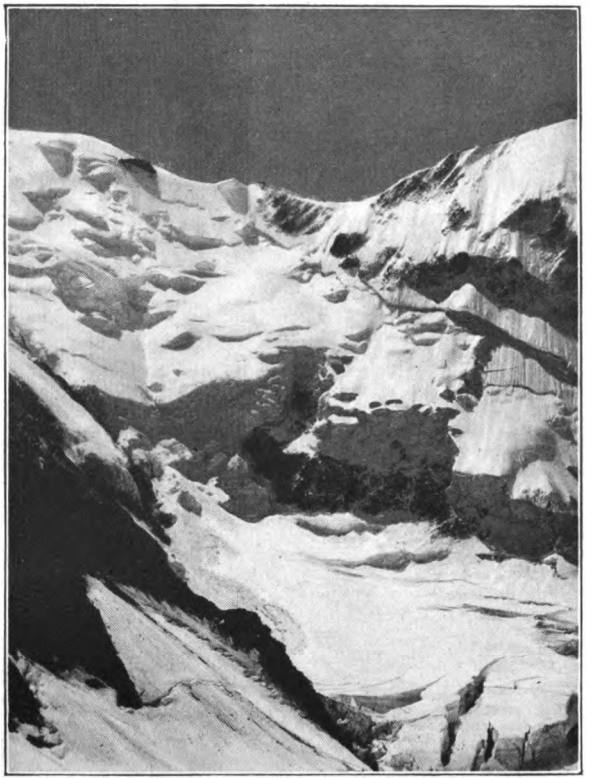
Aig. du Goûter. Col and Aig. de Bionnassay.



[*Photo. P. Montandon.*

FROM COL DE VOZA.

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The French side of the Col de Bionnassay from glacier below Tête Rousse hut.



TAKEN IN AUGUST, 1920, FROM BELOW TÊTE ROUSSE CABANE

The Glacier had greatly changed since our ascent in 1919 when there was a huge bergschrund, now closed, which, as will be seen from the route trace, we made fruitless efforts to cross.

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passed and no word of Adolph, so on Tuesday I sent Joseph to Châtelard to telephone home. He learned that the letter had only arrived on Monday night and that Adolph would be with us early in the morning. We accordingly telegraphed to the keeper of the Tête Rousse Inn to open it for us on Wednesday. Wednesday morning came, but with it no Adolph. We were in a difficulty but could only wait. In the afternoon Adolph arrived, some stupid individual having told him that he would arrive at Chamonix just as early if he stayed the night at Martigny instead of at Châtelard.

The weather continued lovely and we were very anxious to get off as we feared the effect of the fine weather on the very steep snow of the col. On Thursday, at last, we left by train for St. Gervais and went on by the Mt. Blanc railway to the terminus, picking up on the way the gardien of the cabane. From the railway terminus it is about two-and-a-half hours' easy going to the Tête Rousse, where we arrived about 6 o'clock. From the view-point at the back of the cabane we had a good look at our col and satisfied ourselves that it would go and that the Bergschrund at any rate would not be difficult, in which idea we were woefully mistaken as results showed next day.

On our return to the cabane we set to work to warm the bottle of soup brought from Couttet's. Our annoyance can be imagined when we found that we had carefully carried a bottle of what was, when we started, *hot water*. Someone had blundered! However, the gardien produced the usual local variety of soup and we had a decent supper and soon after retired to bed—a real bed, as this is an A.1. cabane. The idea of getting the long-thought-of climb, and I suppose the strangeness of everything after the four years' blank, combined with the creaking woodwork, kept me awake and gave me only a very moderate night, which I found had also been Joseph's experience. Even the youngster, Adolph, excited no doubt with the idea of his first snow climb, slept badly. We were up at 2.30, and after Joseph had told the old guide-gardien of our plans and been informed that we were certain to be killed, etc., etc., we set off at 3.30, being followed to the place for descent to the glacier by the old fellow to see if we really were going to try the pass.

The weather was perfect, and in twenty minutes we were down and over the ice and just under the séracs of the Glacier de Bionnassay. We had the choice of two routes, one by the rocks on our left with ice fall covering their upper part,

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and the other up the blue ice couloir in the middle line of the séracs in front of us. Neither place looked too attractive, but after a glance at the rocks we were not for having any dealings with them, being prudent and careful people—the ice fall indeed looked horrible. We were justified in our views, as during the morning the rocks were continually swept by fall after fall of ice and no one could possibly have won through in safety. Having decided on the couloir, Joseph proceeded to cut a way slowly up the very steep blue ice with here and there a short piece of snow or ice of a slightly less difficult character. Eventually we got through the séracs by cutting up an almost perpendicular wall of blue ice, and arrived at the Bergschrund. Here we expected to have no great trouble, but were a good deal surprised to find that the place which looked like a good bridge was quite impossible owing to the Bergschrund having opened. We were at least a week too late. The Bergschrund was enormous, extending completely from side to side of the col, with a huge gap at each end between it and the rocks. It was by no means an easy business to cross it as the snow and ice were so steep. We traversed backwards and forwards, but could find no possible place to get over. Coming back to the left side to where we first looked we decided to see if we could get on to the rocks, although the avalanches from the ice fall were not encouraging. We had a look, and again turned to the Bergschrund feeling very anxious, as the prospect of going back by the way we had come was extremely unpleasant. After some discussion we decided to try to cut round an exposed corner of steep ice on the left end of the Bergschrund and see if it looked any better from there, as it seemed as though there might be a bridge high up. Joseph cut very carefully, and was shortly out of sight. I paid out the rope and as it got near the end was glad to hear his cheerful shout 'It will go!' Very soon after we all stood on the very steep snow slope above the Bergschrund, exceedingly pleased with ourselves and con fident of accomplishing the climb.

Hitherto Joseph had been leading, but Adolph now went in front, making steps in the steep snow, of which however the angle so increased that Joseph again took the lead, bearing to the right to avoid a huge crevasse. Once over the end of this we cut up to a big sérac and sat down to breakfast at 7.30—our first rest after having been going steadily for 4 hours.

We did not wait long as we were afraid of the effects of

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the sun on the exceedingly steep upper slopes, and went on at 7.55.

There was a huge crevasse above us to be crossed which gave us a little trouble, but Joseph cut up some ice at a very high angle and we were soon over with only one small crevasse and some excessively steep upper snow slopes between us and the col. The crevasse—the sixth—gave us no trouble and we were soon on the final slopes. We should have preferred to make our way about 20 to 30 yards to the right, so as to get on to the actual Col de Bionnassay, but the sun was already well on this snow and rapidly advancing on to the snow in front of us. We dared not risk a traverse owing to the great steepness of the slope, so cut steadily up, making our steps after the model of an old-fashioned step-ladder leading to a hay-loft, and just reached the dividing frontier ridge at 10.38, just as the sun touched us. We had 7 hours 8 minutes of pretty hard going from the cabane of the Tête Rousse to the col. Directly I stepped on to the arête, Joseph said to me excitedly: 'Turn round; look at it! Look at it! and we have come up there!' It really did look impossible it was so steep—but there were the tracks.

We had hit the ridge at some little distance from where the Dôme route joins it, and after resting until 11 o'clock we proceeded along it intending to descend the Glacier de Bionnassay italien. The sun had, however, been on the snow for some time and it was in a very bad condition, and, in Joseph's opinion, quite unsafe to descend. We therefore reluctantly decided to go down by the arête which divides the Glacier de Bionnassay italien from the Glacier du Dôme, which is not nearly so steep, to the Cabane du Dôme. We reached the hut in 2 hours—1 o'clock—rested until 3.20 and descended to Courmayeur, reaching Bertolini's hospitable roof at 8.30 French, 9.30 Italian, time, quite tired out. We had had a magnificent day and one of the finest climbs we had ever accomplished. Joseph was at his best and cut any number of steps in ice and snow, the final slopes alone taking some 400 to 500 steps. The climb is naturally a great effort for the leader, and any party who proposes to repeat it will be well advised to make the attempt early in the season and to make certain that the Bergschrund is in good condition, otherwise there is a grave risk of having to return through the steep ice fall, which might be a very serious matter; moreover, above all, the party must be on the final slope before the sun arrives there. Apart from this, it is a magnificent climb, and

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I should say one of the finest pure snow and ice expeditions in the Alps. I should not, however, care to try to descend on the French side even under exceptionally favourable conditions.

After resting a couple of days at Courmayeur, where we met Courtauld and Oliver (who, like good mountaineers, had been out carefully examining the route of their magnificent new climb of the following week), we left on Monday morning for the Rifugio Torino, and on Tuesday descended to Chamonix, climbing the Aiguille du Plan on the way. Just below the top of the couloir I had the bad luck to get a large piece of granite on my right leg, and only the promptness of young Adolph prevented what might otherwise have been a serious accident. As it was, I did not enjoy my six-hours descent to Montanvert, and was laid up for the next fortnight at Chamonix, which was annoying just as one was getting fit and had lovely weather.

On August 27 we had bad weather, which lasted two or three days and filled up everything in the Mt. Blanc range with deep snow. The outlook was hopeless, so as my leg now 'went,' we went, September 2, to Montroc for the night, and next morning, starting at 3.55 A.M. reached the Cabane Julien Dupuis at 10.30 A.M. After pottering about until 1 o'clock we went up a small view-point at the back of the hut and were astonished to see the Swiss mountains free from fresh snow, and the Matterhorn a black peak. The bad weather had been entirely local. Joseph was of opinion that Carrel's *Galerie* on that peak would go, and so in five minutes we were off en route for *Switzerland*. We reached Martigny in time for dinner, and went on thence to Visp and reached Zermatt next day.

After lunch we left for the little inn at the foot of the Matterhorn.

As I was setting my alarm watch Joseph urged me to leave the calling function to him. Unfortunately, he trusted to the hotel people, and it was only at 5 he came in much annoyed at the hotel people having failed to call him. At 5.30 we were off in daylight, and reached the top of the Matterhorn by the usual route soon after 10 o'clock—3½ hours actual climbing.

We started down the Italian side at 10.25 in beautiful weather, descending a little below the 'Echelle Jordan' to the so-called 'Col Félicité' where, after a look round, Joseph announced: 'Here is the *Galerie*.'

All honour to the man who *first* went that way! Once you

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get on to the ledge that winds right across the Tiefenmatten face at the foot of the final almost vertical wall, the difficulties resolve themselves chiefly into the ever-present necessity of taking great care. It is not the sort of place which even the younger and more daring members of the Club would choose for a Jazz dance, for instance! As a matter of fact, I do not think there is a real handhold on the traverse until one reaches the chimney close to the Z'Mutt arête.

After a brief halt we started along the *Galerie*, Adolph leading. We soon came to a piton, and a little less than half way across, a second. These pitons were of no service to us, and indeed I do not see how they can be of any use unless the first man has a long rope and the others use it as an extra hold. As it proceeds, the *Galerie* rises and we were soon at the steep chimney with its double piton at the top and halfway down the ring piton. Adolph descended first, after I had unroped, as we had no spare rope and a long rope was here needed. Joseph paid the rope out to him until he had to let go near the bottom. The rope then came up and I started down. With a man above one can climb down most of the way, but the last bit rather overhangs and the rope is useful for a short drop of a foot or two. Having descended I then unroped and Joseph in his turn passed the rope over the first piton and then in the middle of the chimney refastened it to the ring piton. We were all down at the end of the *Galerie* and on the Z'Mutt arête at 12.35, having taken rather less than an hour's actual going for the traverse.

After a little discussion we decided, the day being fine, to descend by the Z'Mutt arête, and pushed on over the slabs to the head of the Z'Mutt arête, where we had lunch at 1.20, proceeding at 2 o'clock. The descent of the arête is a much more serious undertaking than the ascent. I have ascended twice and in much worse conditions, but on the descent the last man occasionally has to use the rope as a spare rope. All this means delay, and it was 5.30 when we reached the snow arête below the teeth. We had only one axe with us, having left the others behind as the descent of the Z'Mutt arête was an afterthought. Naturally at that hour the snow was bad and Adolph had to make good steps right on the top of the ridge. It was fatiguing work for him, as cutting downhill is tiring work at the best. I wonder how many members of this Club have had the somewhat doubtful pleasure of descending this arête late in the afternoon without an axe? It's not so easy as it looks, especially when one can only go about three steps

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at a time and then has to wait for the last man. The latter, who of course was Joseph, had the worst of it, and as he said afterwards to me—'Adolph broke the step, you made it worse, and it was worst of all for me owing to the bad snow.' I know one member of the party who was not sorry to get to the rock, and I fancy there was not much to choose between us in that respect.

We proceeded, plunging deep into the soft snow until we reached the easy screes. We hurried down these as the light was failing fast, and then had a bit of real bad luck, as in the dusk we went halfway down the wrong couloir and lost some time getting back to the right one. At last we reached the upper ice slopes. It was now quite dark and we could not see to make steps, but finding some old ones crossed to the cliff and sat down with the right leg in the space between the rock and the snow and edged our way down until we could stand up with back to the cliff and feet on the edge of the ice or hard snow until we got to the snow and debris where we had safe footing —all this in the dark. We pushed on down the steepish slope of hard snow until we got to the Bergschrund. Here we stuck. We could not see any way over, and though we wandered along its edge we could not negotiate it. It was by no means an easy job to follow Joseph as he cut steps; one could not see and had no ice-axe to feel with. At last Joseph gave it up and cut up to the rocks again where we found a large stone and decided to stay the night at what we called the 'Chalet Z'Mutt.' By this time it was 9 o'clock. We were all very thirsty and viewed with dismay our inability to get a drink, so Joseph set out to see if there was any water near. After a considerable time, when Adolph and I were both getting a little anxious, he reappeared with two bottles of water. We had some food and huddled together to keep as warm as we could. About 2 o'clock a nasty wind got up which did not add to our comfort. At about 4 o'clock we saw below the lights of three parties starting for the Z'Mutt ascent. At 5.30 we made a move, and then found that we had only to get into the Bergschrund and walk a few steps up it to get on to the other side. We arrived at Zermatt at 10 o'clock, all of us quite worn out but thoroughly pleased with our expedition, which, but for the late start in the morning, would easily have finished the same day.

The particular combination of routes, as far as I am aware, had never been done previously. The Matterhorn was in wonderful condition and the rocks were quite dry.

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It is unnecessary for me to say anything in praise of Joseph Pollinger; his reputation is known to you all, but I would like to say how very satisfactorily his son, Adolph Pollinger, acquitted himself on what was his first introduction to ice and snow. It was a somewhat severe test of a young man without previous experience, but he proved himself a worthy member of his family, and should have a great future before him.

It may be of interest to mention that I found no difficulty travelling, and was quite as comfortable as at any time previous to the war. It is well, however, to leave one's self a rather larger margin of time at stations, and of course to have all one's papers strictly in order.

I am greatly indebted to the members of the Club who have so kindly assisted me and lent me slides, particularly to the nephew of our former president, the late Mr. Woolley, who sent me a number of his uncle's slides, Mr. Howard Priestman, Major Thurston Holland, Mr. Aitken, Mr. Shea and others.

Around Lake Louise in 1919[1] With Ascents of Mts. King George and Assiniboine (Canadian Rockies).

By V A. FYNN.

We reached Lake Louise July 23. The first few days were devoted to training trips. I traversed Mt. Whyte (9786 ft.) alone on the 24th. On the 27th, Mr. and Mrs. Eddy, Mrs. Fynn, Rudolph Aemmer and myself went to Abbot's Pass (9588 ft.) and back. Throughout this period, the weather was uncertain.

On July 29 Rudolph and I took a boy about 17 up Mt. Aberdeen (10,340 ft.) by way of the ice fall[2] of the Aberdeen glacier which comes down between Aberdeen and Haddo. This glacier lies at the head of the beautiful little valley which descends to Paradise Creek between Fairview and Saddleback on one side, and Haddo and Sheol on the other. Rudolph

[1] See 'A.J.' xxxii. 314 for map.

[2] The photograph facing p. 71 of 'A.J.' xxxii. gives a good view of this fall. All of the route followed is visible.

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Aemmer and Edward Feuz, the two Swiss guides stationed at Lake Louise, some years ago reached the snow saddle between Haddo and Aberdeen, from the foot of the ice fall in question, by taking to the steep and somewhat rotten rocks to the east of same. It was our intention to repeat this route, but when we reached the foot of this rock wall at about 12.30, having left the hotel at 7.50 A.M., we found that the whole face was alive with falling rocks and an attempt to scale it would have been foolhardy. This condition was brought about by the unusually small amount of snow, and was to give us considerable trouble in practically every ascent which we made in 1919. The trouble, of course, became worse as the season progressed. In these conditions, we had either to descend the Aberdeen glacier until it became possible to traverse to the foot of the Haddo glacier and reach Aberdeen over Haddo, as I had done in 1917, or force a passage through the ice fall. Inspection of the latter showed it to be in a condition favourable to such an attempt, and we started immediately. On the left or eastern side of the fall, is a narrow ice gulley next to a very high and almost perpendicular ice cliff. This seemed to be the most suitable way of reaching the middle portion of the ice fall, which was much broken up and did not seem to present any difficulties. Rudolph started cutting; but, owing to a little overhang, was presently forced to stand on my shoulders; while, higher, I was able with my hands to steady his feet in the ice steps. The middle portion of the ice fall proved easy and we made good progress, keeping to the right and away from the steep cliff, about the security of which we were not very certain. Presently we were stopped by a very deep chasm, running almost horizontally across the entire fall. The lower lip of this chasm had effectively concealed it up to this time. We were now forced to traverse back to the left, balancing on the narrow edge of this lower lip, and finally emerged on easy ground well above the highest cliff previously referred to. The saddle between Haddo and Aberdeen was reached about 2.30, and after some luncheon we topped Aberdeen at 3.35. Leaving at 4, HADDO (10,073 ft.) was reached at 4.30 and the cabin on Saddleback at 7, by way of the Haddo glacier. I thought I was now ready for some of the better expeditions, but the weather was so uncertain that nothing serious could be undertaken.

In the meantime Mr. Eddy suggested that we go on a camping trip to the Royal Group, and visit Assiniboine on the way. The Potts Outfitting Co. of Morley undertook

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to supply us with an outfit, and their horses were all in fine condition, and the men proved able and agreeable companions.

The Royal Group.

The Royal Group is almost due south of Banff, at a distance of about forty miles as the crow flies. Our attention was called to this group by reports of surveyors, and particularly by the Report of the Commission appointed to delimit the Boundary between the Provinces of Alberta and British Columbia, the first part of which was published in 1917. In this Report Mr. A. O. Wheeler shows a photograph of the whole range taken from Mt. McHarg, which lies on the east side of the Palliser River Valley. It appears that the highest peak of this group, the number of prominent peaks of which happens to coincide with the number of members of the Royal Family, was first seen by Mr. Wheeler in 1913 from Wonder Peak (9300 ft.), which lies north of Marvel Lake, east of Mt. Assiniboine and some twenty miles north of the Royal Group. Mr. Wheeler tells me that he named this peak 'Mt. King George' at that time. Later, during his survey work, he came within five or six miles of the group, located it on the map, and ascertained the heights of the main peaks. The group is about five miles long, and, in the main, runs parallel to the Palliser Valley where the course of the latter is almost due south. The most easterly summit, Mt. Prince George, (9450 ft.) is the lowest. Next to it in height is Mt. Princess Mary (10,090 ft.), the most southerly peak. All the others are above 10,500 ft. and Mt. King George is 11,226 ft.

We decided to approach the group by following the Spray river to Palliser Pass (6836 ft.). On August 1, I left Lake Louise for Banff, with the intention of supervising our final arrangements. The rest of the party consisting of Mr. and Mrs. Eddy, Mrs. Fynn, and Rudolph, followed by the first train next day. The weather improved somewhat towards noon, but we were unable to leave until 3 p.m. owing to some unforeseen complications. Our chief pony-guide and cook was 'Waddy' Potts. Robert Baptie and Jack Fuller acted as horse wranglers. Our party of eight, and sixteen horses, started from Banff Springs Hotel and immediately struck south, following the eastern shore of the Spray river. After a few miles, the trail crosses the river on a recently built bridge and only rejoins it after the Spray lakes have been passed. That day we made camp at 7.30, well beyond

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Canmore Gap, in a spot where water was very difficult to get (14 miles), the result of our late start. The next day we left at 10, and camped just beyond the second Spray lake (12 miles) on the shores of the Spray river, just where the trail branches to Kananaskis lakes. The fishermen of the party were unable to add much to the larder, as the Canmore miners had apparently fished the river dry. It began to rain during the night and rained steadily all the next day, so we decided not to move camp until next morning. A most enjoyable ride took us past the entrance to Bryant Creek (5 miles) in ever brightening weather. Beyond Bryant Creek, the trail was very rough for a couple of miles and we had some trouble with our pack-horses. Towards noon we found ourselves at the entrance of White Man Creek, and realised that we had missed the trail. Unfortunately we had been unable to secure detailed maps of this country, and now felt the need of one for the first time. As a matter of fact, we ought to have crossed to the eastern bank of the Spray, 2½ miles beyond Bryant Creek, just where the Currie and White Man creeks join it. We finally decided that the quickest way would be to strike due east across country. This was done and the right trail was soon struck. At this point the Spray Valley broadens out, and should permit a good view of the high peaks about Palliser Pass; but we could only guess at these, as the clouds were still very low. At 5 P.M. we made camp on the eastern slopes of the valley, just opposite Spray Pass and Leman Lake, which lies at its foot, but cannot be seen from the Spray Valley (13½ miles).

On August 6, Rudolph and I left camp early, in order to study the country from Palliser Pass, now within 4½ miles of us. We made the pass easily in two hours, left our horses near the monument, and climbed one of the hills to the east. From our last camp, and on our way up, we could see that MT. SIR DOUGLAS (11,174 ft.), just east of the Palliser Pass, was a very fine peak, but the low drifting clouds never permitted a good view of the mountain. They continued to interfere with our investigations and, in the absence of a map, led us to the conclusion that the twin northerly peaks of the Royal Group—Prince John and Queen Mary—lay immediately behind MT. BACK (9883 ft.) and an unnamed peak just south of Palliser Pass. The deep Palliser Valley, which we could overlook from our point of vantage, promised such rough going, and the open spaces and beautiful lakes on Palliser Pass looked so

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attractive, that we decided to suggest to the rest of the party that our main camp be located on the pass. On the north side of Palliser Pass lies the Belgium Lake in an open fairly flat space, nearly one square mile in extent. Just beyond the pass, and on its southern side, are two lakes located one above the other. Back Lake is the larger and the higher. It is, in the main, fed from the glaciers which descend from Mt. Back, and from an unnamed peak to the east thereof, and is the real source of the Palliser River. Palliser Lake receives its water from Back Lake. Immediately west of Belgium Lake is Mt. Queen Elizabeth (9349 ft.) with Mt. King Albert (9800 ft.) behind it, and east of the lake is Mt. Sir Douglas (11,174 ft.) with Mt. Monro (10,145 ft.) immediately south thereof.

Looking down the Spray Valley, Mt. Smuts (9600 ft.) is the only peak which attracts attention. It is a rock summit shaped like a sugar-loaf and looks quite difficult. Looking down the Palliser Valley from Palliser Pass, none of the Royal Group can be seen; but Mt. Joffre (11,316 ft.), some thirteen miles to the south and slightly east, is easily the most striking object in that region, although some of the other peaks east of Palliser Valley also look attractive.

The rest of the party arrived at 1 p.m., and camp was made just east of Belgium Lake and near its southern end. While Rudolph and I had been examining the neighbourhood, we discovered some goat on the eastern slopes of the unnamed peak east of Back; so, in the afternoon, Mr. Eddy, Rudolph, and I, went in that direction, not only to get a closer view of these interesting animals, but also to reconnoitre further in the direction of the Royal Group. We finally reached the southern ridge of the unnamed peak, and looked down upon Tipperary Creek and a large glacier at its head, which one might call Tipperary Glacier. At the head of this glacier, and to the south of it, stand two easy-looking peaks which, in the absence of a map, we took for Prince John and Queen Mary. As a matter of fact, the two last-named peaks are just about three miles directly beyond these peaks. After taking some photographs, we circled around the unnamed peak east of Back, and descended to Lake Back by the glacier just west of the unnamed peak. We felt pretty sure that the two peaks at the head of Tipperary Creek were Prince John and Queen Mary, for their shape agreed fairly well with their appearance in the photograph published by Mr. Wheeler in his report, and the long and steep wall between Prince

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John and Prince Henry appeared to be exactly duplicated by the wall west of Tipperary Creek. We regained camp with the idea of taking the two ladies up one of these virgin peaks. Accordingly, on August 7, the whole party, save the packers, left camp at 7 and climbed to the saddle east of Mt. Back by way of Lake Back. A descent to the Tipperary Glacier led to the gap between the supposed Queen Mary and Prince John, when we quickly realised our mistake; for the whole of the Royal Group stood revealed right across a deep and beautifully wooded valley, in which we later discovered a herd of ten elk with two or three fine heads among them. I will refer to it as the ROYAL VALLEY. This discovery was a very sad blow, particularly to the ladies, who up to this time had been under the impression that they were going to make the first ascent of one of the principal peaks of the Royal Group; but nothing could be done, and we settled down to a closer examination of the country. The weather was now perfect, and every detail stood revealed. It became apparent that Mt. Queen Mary could be reached from Tipperary Glacier by circling around the peak we had taken for Queen Mary, descending into a high valley beyond, traversing it and attacking the peak from the north-west. It also looked as if access could be gained from the north-east, just to the right of the beautiful hanging glacier which entirely covers this peak on this side. Such an expedition was, however, clearly beyond the reach of the ladies and would require a bivouac at the foot of Queen Mary. After watching the animals down in the Royal Valley, admiring the Royal Group, and settling upon a mode of approach to Mt. King George, it was decided that the ladies should go back to camp with Rudolph, while Mr. Eddy and myself were to climb the false Queen Mary. When about half-way up, we found that those behind were following us. Rudolph never relished the idea of going back to camp within a few stone-throws of an unclimbed peak, and finally persuaded the ladies to let him take them up. We enjoyed a beautiful view from the summit. Mt. Assiniboine was clearly to be seen in the north. The Royal Group, immediately to the south, looked finer than ever, and Mt. Joffre, with his attendant satellites, very imposing We descended by the north-west ridge of the false Queen Mary, traversed over to the south-east ridge of Mt. Back, crossed same and descended to the gap above Lake Back, over some very steep snow and ice which gave the ladies all the thrills they wanted. On the way down, we had a splendid

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ROYAL GROUP.
From the North-East (Tipperary Glacier).

Figs. 10-11

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view of Mt. Sir Douglas, but could not agree on the best line of ascent. From this side, the peak looked undoubtedly difficult.

The weather being very fine, and appearing settled, it was thought best to make our attempt on Mt. King George without further delay. Mr. Eddy did not feel in sufficiently good training to attempt the probably strenuous trip; so on August 8 Rudolph and I took Rob, and five horses, and descended to Palliser Lake. Up to that point the trail is well marked and presents no difficulty, but on the east side of the lake it suddenly turns east at a point where it is hardly marked, and crossing a ridge, dips down into a deep gulley, parallel to the one in which the lake is located. The slope is here very steep, the trail dropping 1000 ft. in a little more than one mile; and although fairly well marked, we found it extremely difficult to follow because of wind-fall. The whole of the Palliser Valley was burnt out many years ago and nothing but bare tree-trunks are to be seen. Their roots are, of course, decaying, and many of these trunks go down with every wind storm. Nobody had been in this district for many years. The last of the very few parties which have visited this region was probably Mr. Wheeler's when surveying the boundary, and I do not think he went beyond Le Roy Creek. Our difficulties began as soon as we stepped on to the steep slope and we advanced at a snail's pace, for it was necessary to cut a way for our horses. At one point, one of the pack-horses attempted to vault a huge trunk a little to the side of the place cut out, and losing his balance went rolling down the slope. Luckily his progress was arrested by another trunk, the pack wedging and holding the animal with all four feet in the air. It was very lucky that we had rope enough, for both front and hind legs had to be tied to trees while he was being unpacked and rope again used to enable him to rise, while repacking on that slope was also quite a job. This very horse was carrying my camera as I thought there would be nothing to photograph, whereas no better subject could have been than this cayouse at the height of its difficulties! Our struggles continued without intermission. After the 1000 ft. of steep descent, the trail became almost entirely obliterated, and the timber very much thicker and larger. We had two axes with us, but no cross-saw, which packers are averse to carrying, alleging that it cuts their ropes or the packs; but it is only necessary to cover the teeth with leather, and a saw saves a good deal of time, and in camp much wood. Rudolph kept the lead almost all day,

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while I helped to chop the trees and move the scenery, Rob being kept busy with the five horses. In an awkward place near the river, another horse rolled over and the ropes again came into use. Throughout this day and the following, Rudolph proved himself a first-class woodsman and the line he selected was most certainly the best available. At that, it was difficult enough to make us often wonder whether we should ever succeed in reaching the flats. We struggled on and on without rest and when we made camp at 8.30, not far from the mouth of Le Roy Creek, we had covered a bare four miles. We camped in a swampy bottom and that night slept on willow branches, with the horses grazing all about us and porcupines creeping over the roof of our tent trying to get at our provisions.

There was a little rain during the night, but the next morning broke fine and we were off at 10 (August 9). It was a repetition of the previous day's performance, except that there was even more timber, and an almost obliterated trail. After passing the mouth of Tipperary Creek, conditions improved considerably and we made better progress. At last, at 4 P.M., we reached the creek which comes out of the Royal Valley in which we had seen the elk, and out of which the Royal Group rises (3½ miles). We had decided to make our way up this valley to the foot of Prince George. We made camp on the south side of the Royal Creek, and after a hearty meal and a little rest, Rudolph and I shouldered our packs and began our climb at 7.30 P.M. We decided to carry nothing but provisions, a sweater and a raincoat, and left Rob in charge of the camp and of the horses.

The entrance to the Royal Valley is narrowed down by steep ridges to the north and south of the creek, and the extent of it is not realised until one of these ridges has been climbed. When we had a good view of Mt. King George from the head of Tipperary Creek, we decided that the best way to attack it would be along its north ridge. The hanging glacier seen between Mts. Prince George and Prince Albert, and the ice slopes on the E. side of the north ridge of Mt. King George led us to expect to find a glacier behind Mt. Prince Albert, and between Mts. Prince George and King George. We therefore decided to climb to the flats seen east of Mt. Prince George, go round or over the latter on to our expected glacier, pass back or south of Mt. Prince Albert and thus reach the eastern slopes of the north ridge of Mt. King George. In order to reach the flats east of Mt. Prince George, it appeared

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best to climb the ridge guarding the entrance to Royal Valley on the south, and this we proceeded to do. For hundreds of yards we walked on tree-trunks, without ever touching the ground, and soon realised our wisdom in abandoning the pack train. Where the slope was steep, we had to push our way up through thick undergrowth interspersed with fallen trees, so that our progress was not very rapid; while patches of large and very delicious blackberries delayed our progress still more. At the edge of the timber, we traversed in a westerly direction to where we could hear water. At 10 P.M. we stopped at about timber-line, in the first gorge west of the wooded ridge guarding the entrance to Royal Valley, made a fire, and rested until it was light enough for us to proceed. At about six o'clock on August 10, leaving some of our extra clothes, we climbed over grass slopes, screes and snow patches to the foot of a steep rock-wall, above which we could see a small and sheltered valley in which grew a few trees. A snow couloir and some steep rocks, a traverse to the east, and we stood in the little basin. This spot would make a very pleasant bivouac ground, although firewood is not very plentiful. From here we reached the flats east of Mt. Prince George without difficulty at 8.20, and after a breakfast, proceeded to cross the south ridge of this peak. We scrambled up some very loose shale slopes to the foot of a small glacier which we skirted along its north edge. This brought us to the foot of our ridge. The ascent of Mt. Prince George from this point presents no difficulty whatsoever, and we watched a goat go to the top. Not knowing just what lay on the other side, we thought it better to follow what we imagined would be the shortest line, and therefore proceeded to cross the ridge by means of a very steep snow couloir. We were delighted to find that our bold guess as to the existence of a convenient glacier south of Mt. Prince Albert was correct. A very large glacier fills the basin between Mts. Prince George, Prince Albert, King George and Princess Mary, and drops south and out of sight down a deep-cut side valley which runs into the Palliser Valley, soon after the latter makes its sharp turn to the west. The panorama reproduced was taken from this spot, reached at 10.30 A.M. The weather was very fine, but a few clouds hung around the summit of Mt. King George.

We quickly decided that our best plan was to cross what may be called King George Glacier, and try to reach the north ridge of our peak by way of the very steep, but nevertheless promising-looking rib just north (to the right) of the small hanging

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glacier on the eastern slope of the mountain. The descent to the glacier, begun at 11, and its crossing, were easy. At 12.50 we stood in the pocket between Mts. Prince Albert and King George, and near the foot of our rib. After lunch we started at 1 P.M., and were soon at grips with the enormous bergschrund. Luckily, part of the upper lip had broken away, partly filling the chasm, so that we were able to cross it on a rather precarious bridge. The ice slope above the schrund was extremely steep, but luckily in good condition, and we soon reached the rocks. These proved excessively steep in the lower part of the rib, but were very firm and afforded one of the best climbs we had had anywhere in the Rockies. Unfortunately, this welcome condition did not last, the upper third of the ridge being composed of a very brittle kind of rock requiring very careful handling. In a surprisingly short time we reached the ice ridge, well seen in the photograph, which connects our rib with the north ridge of the mountain. Being in the lead, I began cutting the necessary steps, while Rudolph was making a careful survey of the surroundings, with a view to possibly improving on our route on the way back, but after a while (feeling somewhat tired, and my hands being still swollen from much handling of the axe down in the Palliser Valley) I came back and asked him to finish the job. The north ridge, which was reached at 3.15, gave us a most enjoyable climb, partly on ice and partly on rocks, with an occasional fairly difficult passage, and at 5.07 P.M. we reached the summit of MT. KING GEORGE (11,226 ft.), being rewarded by a practically perfect view, in which the immediate neighbourhood and Mt. Joffre formed the most striking features. The rock on the lower part of the mountain is limestone, around the summit it is quartzite. After building a large stone man, and taking sundry photographs, we started down at 6 P.M. The top of the rib was reached at 7.25 and the bergschrund crossed at 8.35. We both felt somewhat disinclined to climb over the south ridge of Mt. Prince George again and very foolishly, in view of the late hour, finally decided on going round it. This route proved easier, it is true, but much longer, and the moon had been shining quite a long time when we at last reached the flats east of Mt. Prince George and began the descent to our bivouac. All the steep parts of the climb were, as luck would have it, in shadow, and our progress was difficult and slow, but at 12.55 A.M. we finally did reach our last night's bivouac. It was out of the question to negotiate the remainder of the route back to our horses during the night, so we lit another fire, brewed some coffee, and finished our provisions.

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As soon as we had eaten, I crossed over to the far side of the fire, wrapped myself in my mackintosh, and Rudolph asserted next morning that I immediately fell to snoring. Towards 4, the cold woke me and I found the fire low. While rebuilding it, I noticed that friend Rudolph had dropped in his tracks and lay on his stomach, with arms over the remains of our food, sleeping soundly. He must have been a very close second.

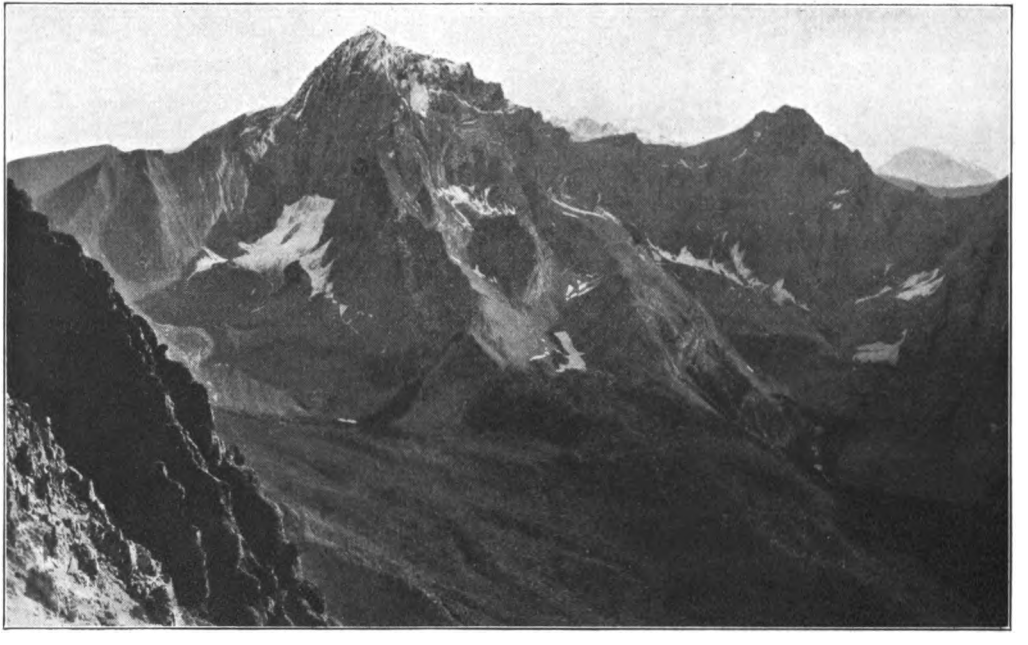
As soon as it was light, we packed our belongings and reached our main camp shortly before 8 A.M. Rob had sat up until late, keeping a bright fire going. We now found him sound asleep, but he was up in a minute and soon prepared a most delicious meal. At 10.30 all our belongings were packed, and in beautiful weather we began our return journey to Palliser Pass. Having very carefully blazed the trail, we had no difficulty. This, however, was not entirely due to the good blazing, but to the remarkable intelligence of one of our pack-horses, a wiry little chestnut mare, who took the lead and never faltered but twice, leading us at an extremely fast pace through the maze of brulé and underbrush right back to Palliser Pass. We had more leisure to look at the scenery on this trip and found the country very interesting. Game is evidently plentiful and bear must be particularly numerous. The fire-weed grows in great profusion, and its bright red-purple colour adds much to the beauty of the scene. In many places this weed is fully 6 ft. in height, and horses entirely disappear from view. The return journey was, however, not without incident. The extremely rough going made it almost impossible to keep the cinches tight. While crossing a deep ravine, Rob's hat was knocked off by a branch. I was following him and while stooping to pick it up, my saddle slipped and I found myself on the ground, with one foot fast in the stirrup. Rob, fortunately, was able immediately to catch my horse and thus saved damage. Later, while going up a very steep bank, covered with brulé, Rob's saddle slipped back, whereupon his horse promptly kicked the saddle and Rob away down the hill. Fortunately he was not seriously hurt, although his back did come into rather abrupt contact with a large tree-trunk. Near the top of the pass, at a spot which was so steep that we all got down and led our horses, Rudolph's charger got away from him, wandered off the trail, and gave considerable trouble before it could be caught. Nevertheless we made remarkably good time, and in four hours, at 2.30 P.M., were welcomed by the rest of the party at our Palliser Pass camp.

We now heard that Dr. Hixon with Ed. Feuz and a pack

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train had pitched camp in Spray Valley, just below Palliser Pass, intending to ascend Sir Douglas. On our way down Palliser Valley, we had had a glimpse of its S.W. side and thought an attempt might succeed. In the hope of being the first to reach this summit, Rudolph and I left camp the following morning (August 12) at 6.30 A.M., and crossed an intervening lightly-wooded ridge to the south-west foot of the mountain. There is a deep-cut valley between the S. ridge of the peak, joining it to Mt. Monro and the S.W. ridge. (See the picture of Mt. Sir Douglas and Mt. Monro, Fig. 21.) The latter divides into two diverging ridges which enclose a pocket filled with scree, out of which protrudes a large island of solid rock. Our idea was to get into the deep-cut valley at the foot of Mt. Monro and then work our way up to the southern ridge of Sir Douglas, somewhere in the neighbourhood of the steep ice-filled gulley on the W. side of the south ridge. As we approached the mountain, it seemed to us that it would be better to enter the pocket formed by the bifurcation of the S.W. ridge and to gain this ridge somewhere near the point where it divides. We were in the pocket at 8.15 A.M., and after a short rest, during which I changed into climbing shoes, we struck north and reached the W. branch of the ridge, close to where it divides, at 10.45. Progress was barred by a huge gendarme just beyond the junction, which all our efforts failed to circumvent, and we turned back at 11.20. We descended to the height of the island of rock previously referred to, then traversed above it and crossed the southerly branch of our ridge, where it forms a flat shoulder on which a long and a short strip of snow are seen in the photograph. We could now see the head of the deep-cut valley at the foot of Mt. Monro, and found that it holds a glacier which leads up to the ice couloir, the top of which is clearly seen in the photograph, and which reaches high up on the southern ridge of Sir Douglas. It was immediately evident that we were up against a very difficult problem. Had it been possible to cut one's way up the ice couloir, things might have been different, but it was now nearly one o'clock and stones were continually coming down this ice slope. The rocks above it did not look by any means easy, but they can probably be negotiated. The south face appeared to offer the only chance, so we tackled it immediately. As Rudolph had no climbing-shoes, I took the lead and struggled hard to make progress over extremely difficult and very steep rock. We reached a considerable height, but finally had to give it up, turning back at

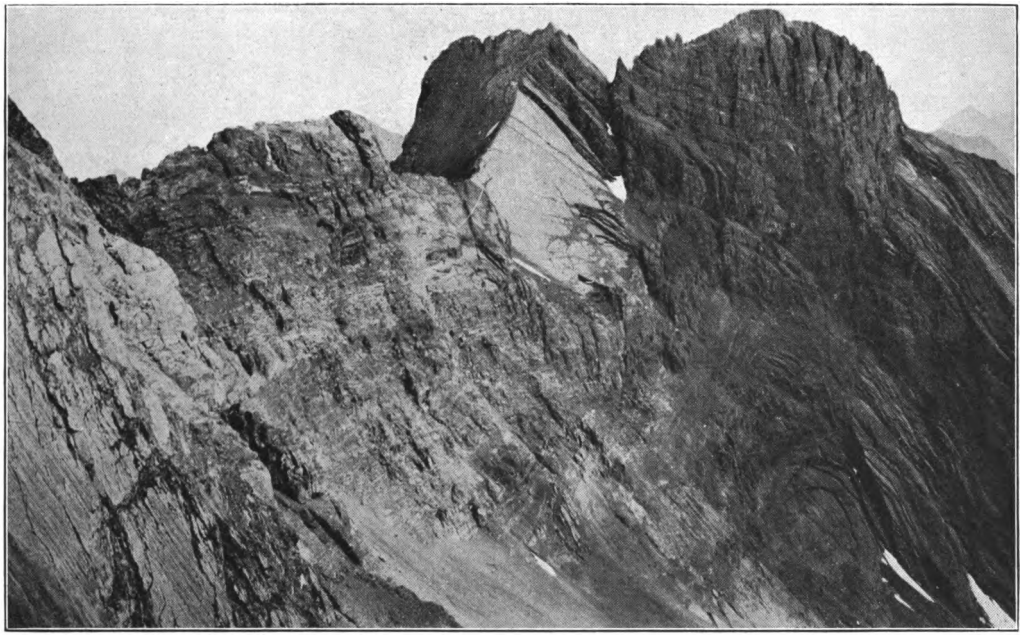
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MT. SIR DOUGLAS AND MT. MONRO.
From slopes S.W. of Palliser Lake.

Fig. 21

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MT. MONRO FROM S. FACE OF MT. SIR DOUGLAS.

Fig. 24

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2.45, probably within 700 ft. of the summit. The descent to the glacier was by no means easy, but we finally accomplished it and followed the little valley at the foot of Mt. Monro. This mountain is of very interesting formation. It is well shown in Fig. 24. Neither of us had ever seen such vile scree, or so much of it in one valley. The Dauphiné, with its famed *éboulis*, cannot compare. At last we left the scree behind us and traversed in an upward direction, emerging close to the spot where we had entered the pocket in the morning, and reached our camp soon after six. We there learned that Ed. Feuz had taken Dr. Hixon to the summit of Sir Douglas the previous day, and that we could have seen their stone man before leaving camp, had we taken the trouble to look. It was pointed out to us now. It appears that Ed. Feuz, with Dr. Hixon and a friend of the latter, left their Spray Valley camp with a view to reconnoitring, and ascended by way of one of the glaciers on the north side of the peak. Encountering no difficulties, the party reached the summit in a very short time from camp, thus accomplishing the first ascent of this veryfine peak.

As far as we could see, it would be quite difficult to approach the Royal Group from the west. Mt. Queen Mary and Mt. Prince John can undoubtedly be reached from Palliser Pass, and climbed from a bivouac north of these peaks. This bivouac could be reached from Palliser Pass in something like eight hours. It is possible that these peaks can also be reached from the Albert River Valley, but I do not know whether there is a trail in that valley, although there is one as far as Spray Pass. Mts. Princess Mary, King George, Prince George, Prince Albert, Prince Edward, and Prince Henry can all be reached from the Royal Valley, access to which can be had from the flats of the Palliser River. King George glacier can possibly be reached from the south by following the stream which flows out of the same, but to this end, it would be necessary to go down Palliser Valley beyond the point where it turns west. This, I know, will require a good deal of work, because the brulé is there thicker than ever.. The side valley leading up to the King George glacier may also present very serious difficulties. Our observations lead us to believe that Mt. Princess Mary can readily be reached from King George glacier over its north ridge. It will probably be a good, but not difficult climb. Mt. Prince George is interesting as a view-point, but is nothing but a shale slope on the south. Both peaks of Mt. Prince Albert

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can readily be reached from the head of King George glacier. Mt. Prince Edward is probably the best climb after Mt. King George. The best approach appears to be from the Royal Valley up the eastern face, to the gap between Mts. Prince Edward and Prince Henry. From this gap, both of these peaks can apparently be reached, the easiest approach to either being from the west, which means a traverse from the crest of the main ridge to the western ridges. Mt. Queen Mary will probably afford another fine climb next in difficulty to Mt. Prince Edward. The easiest approach appears to be from the west, the next best route from the north-east. Mt. Prince John is really nothing but a second summit of Queen Mary, and can readily be reached from the latter. The ideal way of exploring this group would be to take a pack train up the Royal Valley and make camp near timber-line, at the foot of Mt. Prince Edward, exploring the southern end of the group, and then move camp to the highest and northerly part of the Royal Valley, from which Queen Mary and Prince John could be climbed. A good deal of work will, however, be required to cut a trail to the first camp, and it may not be altogether easy to take the horses to the second. The upper part of the Royal Valley is very beautifully—but rather thickly—timbered, and big game is very plentiful.

Mt. Assiniboine—11,870 ft.

The next day, August 13, we all worked hard to break camp, and get away as soon as possible. The ladies and Mr. Eddy had enjoyed their stay on the shores of the beautiful Belgium lake very much indeed, but were now ready to move on. We started at 11 in a light rain and made our way rapidly down the Spray Valley, our intention being to camp that night high up in Bryant Creek, somewhere near Marvel Lake. We kept to the east side of the Spray River all the way to the two sets of teepee poles which stand on the camping ground near the point where Currie Creek runs into the Spray (2 to 2.15), crossed to the west side of the river, and soon branched off into Bryant Creek. The weather showed signs of improvement and we made good progress, although we lost a little time at the entrance to Bryant Creek because some of the ponies insisted upon following the Spray. To the surprise of everybody, we reached the camping ground near Marvel Lake (17·5 miles) at 4.40, leaving us plenty of time to walk to the knoll, from which such a beautiful view

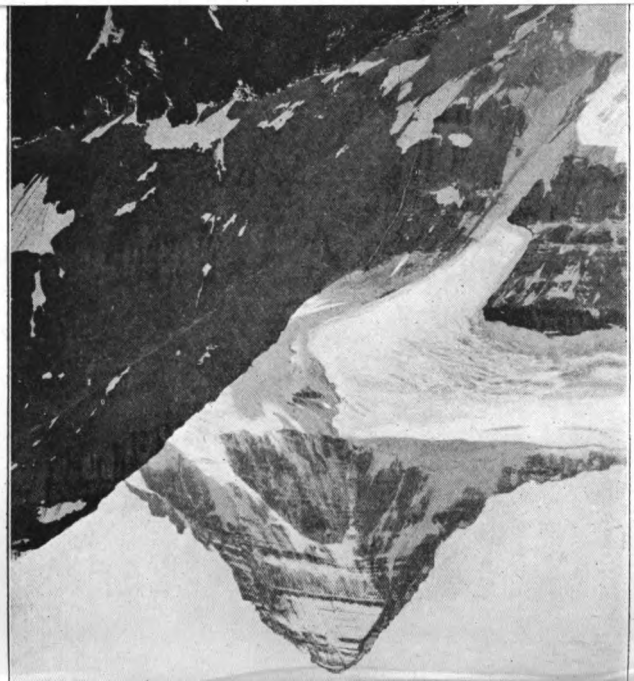
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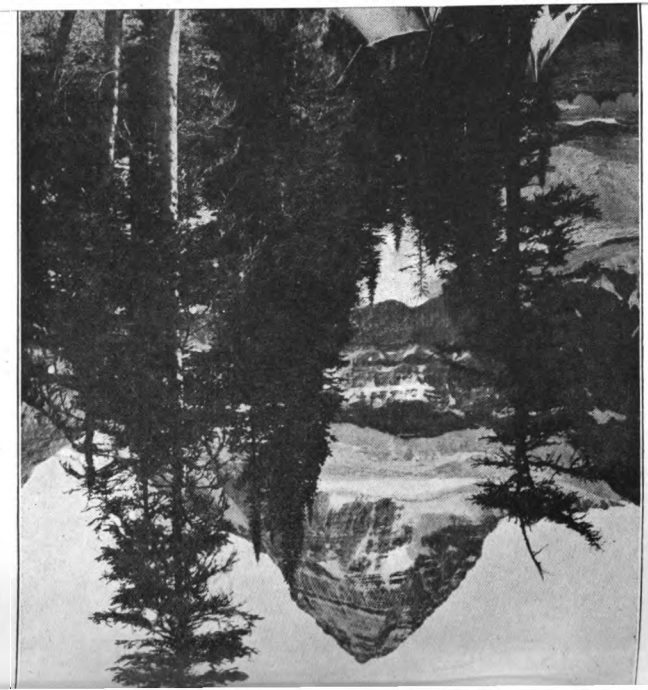


Fig. 28



Fig. 29





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is had of Marvel Lake and the Assiniboine Group, comprising Mts. Gloria, Eon (10,860 ft.), Aye (10,640 ft.) and Assiniboine.[3] The clouds still hung around Assiniboine, but otherwise everything was clear and appeared in a very beautiful light. Knowing that we were within a short distance of our next camping ground near Lake Magog, on the north side of Mt. Assiniboine, we only left camp at noon (August 14) and leaving Allenby Creek on the right, skirted Gibraltar and Cascade rocks and climbed the partly steep trail leading to Assiniboine Pass (7152 ft.).[4] From this point the trail winds in and out through nearly level green meadows, with occasional patches of trees, and with Mt. Assiniboine in full view all the time. We found a beautiful camping ground after a ride of two-and-one-half hours, a little north of Lake Magog[5] (Fig. 25) in a little grove of pine trees (8 miles). Towards the evening all the clouds cleared away, and Mt. Assiniboine was revealed in its full glory.

August 15 proved to be the most perfect day of the whole tour, the air was cool and there was not a cloud to be seen. It would have been an ideal day to attempt Mt. Assiniboine; but we preferred to put off the ascent until the morrow, and the whole party walked into the Sunburst Valley, just north of Mt. Marshall, in which lie the pretty little lakes called Sunburst and Cerulean. Rudolph and I detached ourselves and ascended Mt. Marshall, selecting a fancy route just for the sake of a little exercise. The view of Mt. Assiniboine from this little peak is particularly attractive.

On August 16, Mr. Eddy, Rudolph, and I, left camp at 4.45 on our way to Mt. Assiniboine by the north ridge. At 5.05 we reached the foot of Wedgwood Peak and scrambled up the rocks of a somewhat steep wall, gradually traversing to the left (south-east) and finally reaching the glacier at the north foot of Mt. Assiniboine (7.40–7.55). At 8.40 we were on the lowest rocks of the north ridge, and a few minutes later stopped 20 min. for breakfast. Thereupon we ascended by the north-west face, gradually working onto the north ridge and following it to the summit. There are two very distinct and almost perpendicular cliffs, which divide the north-west face and the north ridge into distinct sections.

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[3] See the picture p. 52 of the Report of the Boundary Commission.

[4] *Ibid.* pp. 51, 55.

[5] *Ibid.* p. 56.

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These rock walls provide some very pretty climbing. The ridge above the second wall is also quite interesting. The rest of the climbing is, as a rule, quite easy. On this occasion we had, however, to contend with a good deal of ice, which necessitated much step-cutting and occasioned much loss of time. It was not until 2.50 that the main summit was reached. At 3.20 we were back on the lower or north summit, which is of rock, rested there until 4.15, and then retraced our steps, reaching the glacier at 8.45. By the time we got onto the steep wall of Wedgwood Peak it was too dark to proceed, and it was necessary for us to bivouac in full view of the enormous camp fire, about 1½ miles down the valley, which our friends kept going far into the night. The next morning (August 17), we were back in camp at 6.30 A.M., and since the two main objects of our trip had been achieved, and Mr. Eddy's available time was fast running out, it was decided to break camp that same day and try to reach Banff on the 18th. Accordingly we left at 5 P.M., riding in the direction of Assiniboine Pass, but turned north into Og Creek, rode past Og Lake into the Valley of Rocks and down into Golden Valley, where we pitched camp at 6.55 near Big Spring (8 miles). On August 18, we left camp at 8.45, went past Porcupine Camp with its pole teepee, up to Citadel Pass, on to Simpson summit and down into Healy Creek, stopping at Cold Spring camp (10 miles) from 12.45 to 2.15, and reaching Banff Springs Hotel after a long day at 7.30 P.M. (23 miles from Big Spring). The whole party immediately proceeded to the Sulphur Pool, and, after a delightful dinner, took the night train back to Lake Louise where we arrived about 1 P.M., all very pleased with a most delightful trip.

All of the country above referred to is well shown on sheets 10, 11, 11A, 12, and 13, of the Alberta and British Columbia Boundary Atlas.

V. A. FYNN.

Titles to Photographs.

FIG. 25.—N. face of Mt. Assiniboine from Camp near Lake Magog.

FIG. 27.—Mt. Assiniboine from Mt. Marshall.

FIG. 28.—East Ridge of Mt. Assiniboine and Mt. Gloria.

FIG. 29.—East Ridge of Mt. Assiniboine with Lake Gloria and Lake Terrapin.

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'Abseilen.'

By PAUL MONTANDON.

CAPTAIN FARRAR asks me to contribute some notes on 'Abseilen' to the Alpine Journal, in which, hitherto, nothing has appeared on that rather modern feature of our craft. Many British rock climbers and sailors surely have had a much wider experience in this matter than the writer, who has not, in fact, practised 'abseilen' very often. As for the German terms of 'abseilen,' or 'kletterschluss,' let us hope that a linguist will soon find an equivalent name in English.

(1) The most simple method of 'abseilen' consists, as everyone knows, in hitching the main rope or a spare rope over some projection and climbing down, taking hold of both hanging parts of the rope, while the feet will take advantage of any jutting rock. On faces quite smooth or overhanging, and more than a few yards high, it can only be put into practice by exceptionally strong men, or only when the climber is held from above by means of a second rope. As an assistance, the first man reaching the bottom will keep the rope taut, and his comrades can then climb down it as on a pole.

It is generally preferable to make use of a separate rope ring, and to place *this*, and not the rope itself, over the projecting rock. The reserve rope will then travel through this loop and fall down in two parts. The last man can derive assistance from his comrades below by passing the rope to which he is attached equally through the rope ring. His companions may then take part of his weight while he descends on the spare rope.

(2) 'Abseilen' with 'kletterschluss' by pressing one foot upon the other, the rope being between. (Fig. 1.)

This method is still much employed in Switzerland by fire brigades, and also by many rock climbers. The sketch shows better than any description how it works. The rope passes half round one lower thigh and both feet, and is pressed by the upper foot quite into the angle of the lower. The heels have to be forced downwards so that the feet form angles. The legs are almost stretched. As this 'kletter-

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schluss,' or stop, is somewhat easily lost, especially towards the bottom of the wall, some climbers add to their security by passing the rope round one arm. This arm will, however, be squeezed to a certain degree.



FIG. 1.—OLDER METHOD OF DESCENT ON THE ROPE.

This method, although not quite simple, and forcing the feet into a somewhat cramped position, is considered good. It requires some practice. Climbers accustomed to it can easily regain the stop or brake *en route* after losing it. I have witnessed this. This abseil-method causes no pain by compression. There may be objected against it that the nails of the boots will injure the rope, while flexible 'kletter-

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schuhe' do not give quite the same security. Then, also, *neither legs nor arms are free.*

(3) Methods of standing upon the rope.

The reserve rope falls free down, say, the left side of the body, goes under the left foot to the inside, remounts behind the back, and returns over the right shoulder to your front. There you take it with the left hand towards your left, *outside* the cord coming from above. Press it against the latter, more or less as needed. One is therefore standing with the left (or right, as the case may be) foot upon the rope. That leg must be *strictly stretched.* The left hand holds that part of the rope which crosses in front of you. The right hand takes hold of the part coming from above, or is free.

It is suggested that the two parts of the rope might be twisted round one another where they cross and the end be taken underneath one of the arms, so that both arms would be free, or almost so.

Of course, with this system the rope will much suffer by the friction of nailed boots. It is perhaps the most comfortable of all. A false movement, however, or the bending of the leg, means losing the stop or brake. One leg is free.

Josef Knubel practises a somewhat similar method. I understand he slings the rope upon which he stands round the lower thigh and takes it up with the hand, without letting it go over the back and shoulder. He says he has gone down thirty metres free in such a manner. But his favourite Herr might much better describe this guide's method of 'abseilen' than I am able to do (having never seen it), and add something of his own experience.

(4) Bernet's method, by sitting into the rope. (Fig. 2.) (This system has some analogy with 3.) As far as my experience goes, I do not hesitate in giving it a decided preference over all others. When correctly put into action, which is easy, it gives at once a feeling of absolute security. Any footgear will do, and there is no wear and tear of the rope in any way. Both feet are free, and can be put against the wall. One arm also, when the climber is not moving down, or when he chooses to hold himself on the wall, can quite easily be kept free. This is very agreeable, and is of special importance when your way down a wall does not follow a perpendicular direction, but goes sideways. The legs are not compressed, and the sitting position of the climber

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especially when the wall offers some asperities for the feet, comes as near the comfortable as is possible when no artificial means are used.

For the sake of clearness of description, let us now suppose



Del O. Fahrni, S.A.C.

FIG. 2.—BERNET'S METHOD OF DESCENT ON THE ROPE.

that we are standing on a place *lower* down than the rope ring. Turn your back outside, towards the precipice. Look towards the rope. Let it fall down between your legs, then direct it up your back and return over one shoulder to your front. Let it then cross horizontally, on the *outer side*, over the rope coming from above. Take it in hand and

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press it against that rope. Brake when you feel it to be necessary.

Note.—Do not place the rope *exactly* between your legs, but rather a little in advance under one leg, as shown in the sketch. You then somewhat *sit* upon the rope with one leg (say the right), and you should then direct the rope from behind over the other (say left) shoulder.

The very good sketch, kindly drawn for this journal by one of our best climbers and draftsmen, Mr. Otto Fahrni of Thoune, will show very well how this method is put into practice. I venture to assert that the sketch by itself gives already an impression that the method is a good one. The man hanging may swing about, right and left, his outstretched legs kept against the wall, with one hand free. He will be in perfect security as long as the rope ring above holds good.

It is impossible to lose the 'kletterschluss,' or 'stop,' which, if anything, brakes too much. You will go downwards not by friction, but by jerks and under perfect control. When following Mr. Young's fine way over the 'Rothe Zähne' last autumn, we also 'abseiled' down the steep ice couloir between the second and third teeth. Mr. Bernet, when 20 meters down, had the rope round him in the manner described, and then hacked steps across the couloir, hardly holding himself at all, and, as far as I remember, not being held from above. When my turn came to go down, the rope had got wet and heavy, and the 'stop' braked too hard. I then slung the rope only round the upper thigh, and went down all right over the ice in this manner. In free air this would, however, be painful. How the Bernet method works when 'abseilen' has to be done hanging free *in a rope wet and heavy*, I have not practised yet. But I am certain it will then give greater security than any other method. The only question is, if it would not brake too hard. This is possible, even when the rope is directed so as to run over one of the arms, as is sometimes done, instead of over the shoulder.

To put this very simple system into action is, at home, quite easy. You may practise it in your room, fixing the rope in some way to the ceiling. I once went down over the wall of my cottage. Try it, much better, from the branch of a tree. On the mountain side, with space limited, having the ordinary rope round you and the rope ring and reserve rope at your feet, everything is singularly more complicated. Confusion will easily arise. Practice beforehand will, there-

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fore, be of great value, besides being amusing. It is not necessary at all to let down rucksack and axe separately. On the Gspaltenhorn we 'abseiled' five times, and always kept them with us. On taking this 'kletterschluss,' the rucksack will be somewhat in the way of the rope. This may be studied beforehand. One of us let the rope go underneath one shoulder-strap of the sack, but the others did not do so, and it is therefore not really necessary.

. . . . .

There are a great many other methods of 'abseilen.' A little leaflet of the German Club ('Anwendung des Seils,' 6th Edition) describes many of them, and contains good sketches. But *one* secure method, applicable everywhere without any extra means and with every sort of footgear, leaving the feet and one hand free where this is useful, will quite do. Mr. Bernet's method very likely best of all fulfils these requirements. It might also be of use for escaping from buildings during big fires, demanding less practice, and probably less strength, than any other method.

To avoid leaving rope rings ('Abseilschlingen') on a mountain which requires several 'abseilungen,' one may take a rope ring of double length, and lay it doubled over the projection, according to the sketch in the corner of Mr. Fahrni's design. You can recover such a ring after each 'abseilung' by means of a string. That part of the rope ring where the knot is must be placed uppermost, and be arranged in such a way that it will easily glide over the underlying part when drawn down. Mind that the two parts be not entangled together. The place where the knot is has to be placed high up, and the string for recovering the ring must be fastened just *above* that knot. This arrangement will carry down the doubled loop quite easily over the dead point. The rope ring should not be placed in too narrow a crack, unless it be somewhat filled up. This system, invented by Mr. Fahrni, has been often tried and always worked well. Some little practice and care are necessary. It enables you to do with one good rope ring only, and as the loop is double, so is also the security. Of course the needful string must be carried.

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The Western Arête of the Meije.

By HAROLD RAEBURN,

THE first route to be prospected up this grand mountain, the most formidably of the greater Alpine peaks, has been the last to fall. This is the direct route by the W. arête.

Appropriately enough, as the first ascent of the Grand Pic, or Pic Occidental, was made by a French climber, M. Boileau de Castelnau, with Dauphiné guides, in 1877, this direct route from the Brèche fell to the unaided skill of two young men, one indeed a mere boy, of the Dauphiné capital, Grenoble, in August 1919.

As the elder of the two climbers was unfortunately killed last October through an accident on the football field, and the only published account of the climb is a short article in a local paper 'Le Dauphiné,' it may be of interest, and of use, to give a summary of the tentatives and ascents on this side of the mountain. The route is no freak 'variation. Since I first saw it in 1904 I have always considered it the correct, natural, and, given suitable conditions, the quickest way of gaining the summit of the Meije. In this opinion I find myself in good company: Dr. Coolidge, our most persevering explorer of the accesses to the highest peak, and who, with Miss Brevoort, was the first to stand upon the summit of the only slightly lower Pic Central, wrote of the W. arête, after examining the peak on all sides: 'There is one route which may very probably prove to be practicable.'

In 1877 the longer route by the 'Great Wall' was forced by the Gaspards, *who did not like ice*, and Dr. Coolidge made the second ascent by that way.

Once a channel is cut, waters, and men, tend to occupy it. Since 1877 few seem to have thought of the W. arête. Up to last year, only one ascent had been made in this direction, and this was mainly a 'marche en flanc' over most abominable, loose, and for a party of more than two, dangerous rocks, on the N. side of the arête, and an equally or more dangerous ascent of a stone-raked ice couloir leading above the Petit Doigt de l'Épaule.

Mr. Douglas Freshfield has likened Dauphiné to a smaller, barer edition of the N. Caucasus valleys. Those climbers

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who do not know its chief glory, La Meije, have still something to learn of the Alps. There may be such even in the Alpine Club. This must be my excuse for describing shortly the W. arête.

From the summit of the highest peak, the Occidental, 13,081 feet, the arête plunges westwards with startling abruptness over the 'Chapeau du Capucin,' and the razorbacked clothes-horse—resembling 'Cheval Rouge,' one of the most dramatic situations on an Alpine ridge, where the climber, like Caesar, 'doth bestride this narrow world.' The route then leaves the arête somewhat, and proceeds more gently down to the glacier Carré. The ordinary route has then nothing further to do with the W. arête, but crossing the glacier Carré, goes down the S. wall, or Grand Muraille. The W. arête beyond the top of the Carré again bounds upwards and downwards over a couple of gigantic gendarmes. The first of these, sometimes made an objective of itself, is called the Pic du Glacier Carré, the second, and somewhat lower, the double-pronged Doigt, or Grand Doigt. From there the route will be described from the foot, as the descent has not yet been made.

The Brèche de la Meije, and the foot of the W. ridge, was first passed in 1864 by Messrs. Moore, Walker, and Whymper, with Almer and Croz. None of the party thought the ascent from here possible.

In 1875 Mr. Coolidge sent his three guides, C. Almer, C. Roth, and R. Kaufmann, to seek out a way up the W. ridge. They were absent from the bivouac about six and a half hours, and advanced a few hundred feet up the ridge with extreme difficulty.

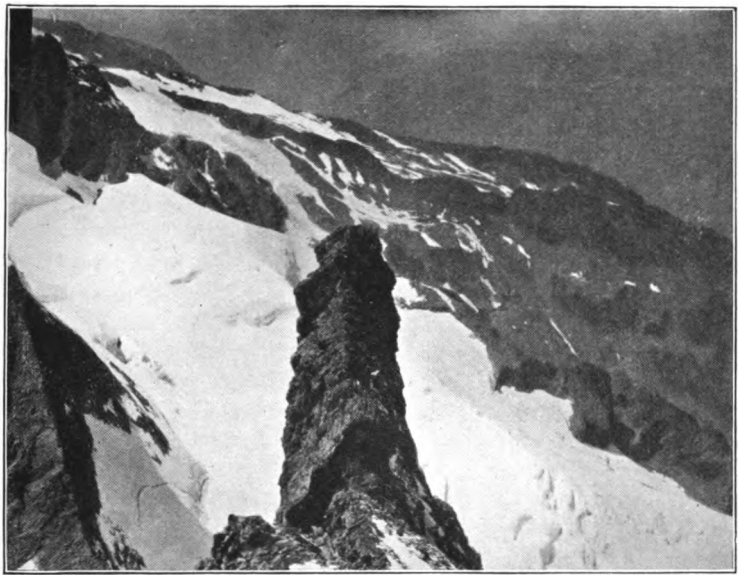
In 1876 Mr. Oakley Maund, with Jean Maître, searched the locality for an hour with telescopes without discovering any possibility of ascending.

In 1877 Mr. Coolidge was back again on his quest. Earlier in the same year Lord Wentworth, with L. Lanier and Emile Rey, made, on June 29, an attempt on the Meije from the Brèche. They seem to have met with bad conditions, and did not persevere far.

On July 22 Mr. Coolidge and his guides made an advance on the height reached two years before, Mr. Coolidge's aneroid read 11,648 feet, but, as he remarks, 'this reading is probably too high.' The party were stopped by the almost vertical arête of the Petit Doigt de l'Épaule. Eight days later M. Paul Guillemin, with Emile Pic, made an attempt from the N. side of the ridge, but they appear to have greatly over-estimated the height attained.

The first and, till last year, apparently the only successful

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[*Photo. H. Raeburn July, 1907.*

Looking down upon Le Petit Doigt of the Brèche arête. The glacier below is that flowing from the N. face of the Râteau, Upper Western Meije Glacier. The ridge to left is the E. Ridge of the Râteau—not yet climbed. The Brèche de la Meije is directly below, and not visible owing to the steepness.

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climb of this end of the Meije was made on July 2, 1885, by M. Verne with the four guides, two Pierre Gaspards, Maximin Gaspard, and J. B. Rodier. In 1880 Messrs. Coolidge and Gardiner, with the two Christian Almers, had on July 8 together, and on July 27 the Almers alone, attacked the ridge by the N.W. Couloir, but they did not reach any height.

M. Verne had already done some exploring on the ridge in 1882, and on June 29, 1885, his four guides and he gained the foot of the Petit Doigt, 'Barrière infranchissable.' From this they retreated for the time, leaving 120 metres of rope on the arête. After two days bad weather, spent in a gîte in the Vallon des Étançons, the party returned. Greatly aided by the ropes they quickly gained the foot of the 'Barrière.' From here they struck out across the dangerously rotten N. face of the ridge, reached the ice couloir, and ascended it to the 'Épaule,' and from thence easily gained the usual route above the 'Pas du Chat.'

For a party of five this was a very dangerous expedition. I do not consider M. Verne's description of it in the 'Annuaire' for 1885 of the Club Alpin Français, at all too highly coloured. He tells of their wounded hands, and the gash in the thigh received by one of the guides. In the Romanche valley this climb is ignored, or its reality denied. The reason is simple, all the guides came from the Vénéon side of the mountain. A parallel may be found in the ignorance or denial of the Zinal guides of the first ascent of the Dent Blanche from that side by Messrs. Anderson and Baker, with Zermatt and Oberland guides.

M. Verne's narrative seems to have acted as a deterrent to further attempts on this arête by guided parties; I cannot trace any published notices of it till the article by M. Claudius Main in 'Le Dauphiné' for September 7 and 14, 1919.

It appears that M. Main, though the elder of the two climbers, had done no climbing before the winter of 1918–19. His companion Plossu, though so young—under seventeen—was already a keen and good mountaineer, and had already been up the Meije's S. wall as far as the 'Pyramide Duhamel.' It is curious that in studying photographs and routes M. Main, not knowing anything of the mountain, selected the W. ridge as the usual way up. His better instructed friend burst out laughing at this. Presently, however, the idea began to appeal to him; it was resolved that their attempt should be made direct from the Brèche.

The two friends reached La Grave about 11 A.M. on Friday, August 1, 1919, and left at 11.30 for the Promontoire Hut.

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The Brèche de la Meije was reached at 6.10 P.M., and the Refuge at 6.45.

They left the hut next morning, Saturday, August 2, at 5.45 A.M. wearing crampons, and at 6.30 the ascent of the W. arête was begun from the Brèche. They followed at first the slope below the arête on the Bérarde side, then turning to the left, N., a chimney was climbed and the actual arête gained. This was about one third of the distance to the ledge above the 'Pas du Chat.' From this point, writes M. Main, 'Nous tenons l'arête : aussi nous ne la lâchons pas.' They now had to ascend about 100 metres of smooth steep slabs, which M. Main found by far the hardest part of the ascent : but he admired the way in which his young friend, Plossu, overcame them. Plossu, as throughout, led. This 100 metres is the thin steep edge of the Petit Doigt de l'Épaule, the 'Barrière infranchissable,' which has hitherto stopped every one of the famous guides who for many years had tried this way of conquering the Meije. After a strenuous struggle they at length gained the top of the Doigt. The depression behind this, on the E. side, is inconsiderable. I shall explain the structure farther on. The party now left the arête for a time and traversed over very loose rocks a few metres down on the La Grave side. At 12.30 they regained the arête where it butts up against the foot of the Grand Doigt. From here an easy, if narrow, ledge leads round in a few minutes to the broken rocks above the 'Pas du Chat.'

The young climbers had achieved a notable victory, they had opened a new door, one in my opinion which is destined to remain open, by which the defences of 'La Terrible' may be stormed. They might well have been content. Friends however awaited their arrival at the Refuge de L'Aigle, on the other side of the Pic Central, and after a short rest at the scene of so many benightings, they left for the Grand Pic. At 3.30 this was gained. Unfortunately M. Main had dropped his axe in getting over the 'Chapeau,' and they could not risk the traverse. At 4 they started to descend by the S. wall, and in an hour and a quarter reached the top of the 'Pas du Chat.' By 7.15 they were down at the Pyramide Duhamel, but at 7.50, going too quickly in the fast gathering darkness, Main slipped in the Grand Couloir and pulled Plossu after him. Main was able to stop himself about 10 metres lower, and to hold Plossu who had shot past him, but the latter was badly bruised, and had also received a deep cut in his chest from the point of his axe. Main had now to go behind Plossu to sustain him, and the rest of the descent was rather in the

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nature of a nightmare for the two almost exhausted youths. The hut was eventually gained at 11 P.M. after 17 hours of heavy climbing. Next day they returned to La Grave over the Brèche, where Madame Juge was most kind, and skilfully dressed young Plossu's wound. The pair returned home the same evening.

Naturally this expedition is not very heartily believed in by some of the La Grave guides, who know nothing whatever about the W. arête. M. Main explains that they forgot to put their names in the summit receptacles. The present writer has no hesitation in giving the fullest credence to every word of M. Claudius Main's modestly written and perfectly clear narrative, as he has some knowledge of the route. Moreover he not only watched the same party, this time in company with a young Grenoble lady, finishing at the end of last August the traverse they had wished to make in the beginning of the month, but later on saw their cards in the summit bottles.

To me it is rather surprising that this route has been neglected so long. *Given suitable conditions*, I do not think that it will be found of any extraordinary difficulty.

I have myself had bad luck with the arête, and my acquaintance with it is, to the extent of the '100 metres' stretch, incomplete.

I first saw the arête in 1904, when crossing the Brèche with Mr. C. W. Walker, A.C., then, like myself, a member of the Scottish Mountaineering Club. It was Walker's first season in the Alps, my own second on the great peaks, and we were content with the ascent of the Grand Pic by the Great Wall. As a proof of our Scottish prudence I may mention that though we gained the top at the excellent time of 8 A.M. the traverse was not attempted in view of Walker's inexperience on ice.

In 1907 I was again in Dauphiné with my friend, Mr. W. N. Ling, A.C. The month was July, but the weather was bad. We spent four nights in the Promontoire Hut, latterly on rather short commons.

The previous week had occurred the frightful disaster to the party of Italian climbers, Sig. Eugenio Moraschini, Giovanni Bertani, and A. Rossini of the C.A.I. (Milan). The first two, who had gone up to the foot of the Grande Muraille to explore the way, slipped on the iced rocks and were of course killed, falling about 1500 feet. A preliminary run up to this place, above the Campement Castelnau, showed Ling and me the Great Wall hopelessly iced; we resolved to have a look at the Brèche Arête.

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Snow lay outside the hut and more threatened, as we trudged up the steep little Étançons glacier to the Brèche. The beginning of the Brèche Arête is steep though probably quite climbable. There is however an easy slope on the Étançons side, the only trouble loose rocks, which we followed as far as a steep chimney leading up to a gap in the ridge.[1] This we ascended. Owing to the fresh snow we now preferred to cut the ridge again for a time on the La Grave side. Regaining the arête some way higher was difficult. Very loose rocks covered with several inches of new snow made very delicate hand and foot work on the part of the leader necessary. We eventually reached the foot of the 'Infranchissable' and the beginning of M. Verne's traverse. The arête was to-day, higher up, quite impossible. The traverse did not appear seriously difficult. Snow lay here and there, and the rocks do not fall off unless carelessly touched. The weather was, however, getting worse. The conditions, the mist, the cold wind, the falling snow, and the snow-covered rocks, put both of us in mind of climbs at Easter on the steeper ridges of the N. Face of Nevis. We knew that the S. door of the Meije was locked. Prudence counselled a retreat, we went back to the hut.

Two days later found us lunching, somewhat lightly, in the broken rocks above the 'Pas du Chat.' The good sun was out at last, but we had lost such a lot of time waiting at the foot of the Grande Muraille till his powerful fingers had peeled off enough of the iceplating to let us pass, that the traverse, or even the Grand Pic was beyond our grasp. We had instead a look at the top of the Brèche Arête. The photograph was taken from here. To read it aright the book must be laid flat on a table, and the photograph viewed through a reading glass.

Like most so-called gendarmes on an ascending ridge the Petit Doigt de l'Épaule, on the upper edge of which one looks down in the illustration, is really only a step or steep shoulder on the arête.

Photographs of these taken from below are apt to be extraordinarily deceptive. For a striking example of this in the present case, the fine photograph of the Brèche Arête by M. Champenay in the 'C.A.F. Annuaire' for 1885 may be cited. In this the Petit Doigt appears as a thin and towering aiguille. It is certainly thin enough, but it is not a true aiguille. Beyond going a little way along the ridge above to get the photograph,

[1] The portion of the ridge thus cut off is sometimes styled the Petit Doigt, the higher part of the arête the Petit Doigt de l'Épaule.

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no further exploration of the W. ridge was at this time attempted, and continued bad weather drove us off to the Tarentaise and Italy.

Twelve years elapsed before I saw the Brèche Arête again. At the end of August 1919 I found myself again in Dauphiné. As I had never done the traverse of the arêtes of the Meije, I intended to try it from the Brèche. At La Grave I learned that this, or at any rate the Grand Pic, had already been done by the W. arête by the two young Grenoblois. It would be perhaps more interesting and useful to reverse the route.

At the beginning of September the weather was bad, the La Grave guides declared the arêtes impossible, and the Meije closed for the season. Nevertheless the sun shone out, and through the enthusiasm and enterprise of a young officer of 'Blue Devils' and his American aunt, (how history repeats itself!) the passage was again opened.

I watched through M. Juge's big telescope several parties on the arêtes. The young Grenoblois, with a lady, completing their conquest. Two English friends and their guides, Messrs. Tucker and Frazer, and a young French officer and his two guides.

For a party of three amateurs the Meije traverse will, unless they already know the mountain, or have extremely favourable conditions, almost certainly result in a night out. The young Grenoblois spent the first night above the 'Pas du Chat,' they gained the top of the Central at 8 P.M. on the second night, but got down all right to the Aigle Refuge by midnight.

After this the weather again became dubious. Mr. and Mrs. Tucker and Mr. Frazer went off to the Chalet de L'Alpe.

On Friday, September 12, I set off for the Refuge de L'Aigle, getting a young man, a son of Emile Pic of Col fame, to help me with a rather heavy load as far as the foot of the Tabuchet Glacier. At 8 P.M. on Saturday, I found myself on the ledge above the 'Pas du Chat.' This was a good deal later than I had hoped for. Friday night was bad at the Aigle. The wind howled and moaned through its steel rigging, and the hail seldom ceased to rattle on the windows and roof. Not till after 7 A.M. was it possible to make a tentative start in rather thick mist. It cleared somewhat on the Central, though the wind was still high and cold, and I went on over the arêtes.

After three o'clock the weather again got very thick, and it hailed rather heavily. I went down the W. arête, mostly traversing a few metres down on the La Grave side till just above the Petit Doigt de l'Épaule. Prudence and the hour, the weather

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looking decidedly nasty, now counselled, that as I knew the Great Wall well, it would be wise to drop, not literally of course, down the Muraille to the Promontoire Hut before the early darkness of mid-September came on. I therefore scrambled up again having spent 35 minutes over the descent and re-ascent. Possibly the warning whistle of 'The Spirit of the Meije,' an ancient *corneille des Alpes*, or Alpine Chough, which has greeted me here on both my visits, may have hastened my decision. I quote from M. Verne's article the guides' superstition regarding this bird: 'Je ne suis jamais monté à la Meije sans la voir, et je n'en ai jamais vu d'autres. Celles qui ont essayé d'y venir ont dû s'en retourner bien vite ou périr.'

The Muraille is uncompromising, but honest. It does not permit of much variation till near the bottom, when it is necessary not to get too far to the E. under the overhang of the Glacier Carré. It seemed quite familiar after 12 years, the only troubles were the swinging sack, and the iceaxe stowed away in the palm of the left hand occasionally got in the way of suitable finger-grips.

At 5.50 P.M. I opened the door of the welcome Promontoire, just as a livid and evil-looking evening was closing in. The actual traverse, going time, occupied rather under 9¾ hours. Next morning I returned to La Grave for breakfast, taking just under 4 hours for the passage.

It may be as well to note that the Meije is now *unroped*. This reduces the times when the climb is possible considerably. There is, it is true, a thick cable still remaining at the Pic Zsigmondy, but this is very 'pourri' and should not be touched.

The hut at the Bec de l'Aigle is first-rate, clean and comfortable. There is however no wood, and the position is very exposed to wind. This new refuge renders ascents of the Oriental and Central summits very easy, and is also suitable for the fine Pic Gaspard, from a distance the most important point on the Meije massif.

It seems, however, to be very little used by the traversing parties, unless by exhausted climbers coming over from W. to E.

La Grave guides seem to much prefer going over the Brèche to the Promontoire the first day, and thus doing the traverse from the La Bérarde side. For this preference there are probably two reasons. The really stiff climbing is thus done in the earlier part of the day; also, no doubt, the guides dislike the task of getting tired climbers down such an impressive-looking place as the Grande Muraille at the end of many hours climbing. The really dangerous part of the descent is that of

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the Grand Couloir, below the Muraille. The angle lies for the most part between climbing and walking, at which angle it is much less easy to stop a man who slips, than were it much steeper. The rocks are also loose in places, slabby, and lubricated with small débris in others. This is where M. Main slipped. The Grand Couloir was also the scene of the fatal fall of M. Thorant, a famous French climber, and his friend, a number of years ago.

It is also not easy to hit the exact place where the couloir can be best left for the Promontoire ridge, especially if the light is beginning to fail. The other reason is probably because by far the most technically difficult piece of climbing on the traverse is the first 20 feet up from the Brèche Zsigmondy on the Grand Pic.[2] This passage was originally led by Purtscheller in stockings, and in the absence of ice should still be done, I consider, in this way. It may be useful to remark here that if the leading climber is wearing, as he ought, socks under the stockings, these must be removed before getting on stocking soles.

The descent of this place is perfectly easy, as by slipping a rope through a rope-ring on the rocks above, one can walk down the holdless slabs in perfect security.

As regards foot aids, kletterschuhe or crampons, neither of these are, I consider, worth while using on the Meije if one has to carry them oneself. Walker and I used kletterschuhe

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[2] Klucker and I were the first to follow the Purtscheller-Zsigmondy party (July 19, 1893). We took from bottom of small Brèche to summit of Meije 35 min., as against 2 hours of the first party. My note reads: 'From small Brèche by the ridge and then 6 m. traverse to right, then ascend 6 m. in a *Rinne*, then traverse to right of cord, and finally cross cord to left and gain summit by a short E.-& W. ridge.' At that time a fixed rope hung below the summit, running first E. and W., then turning at a right angle and dropping in the direction of the Brèche. It was quite unnecessary, and we never touched it. Incidentally, I think ours was the only traverse from La Grave to La Bérarde (valley to valley) within a day, 12.30 A.M. to 10 P.M. = 21½ hours, less 3½ hours total halts = 18 hours actual going.

Much as I respect my good friend Raeburn's opinion on any mountaineering matter, I do not agree with his estimate of the difficulty of this particular bit, which I have twice since descended, once in 39 minutes (4 men), the second time held up an unconscionable time by a party ahead. I look on the Meije, before the huts were built, as an exceedingly *strenuous* climb offering *continuous* but not *very* great technical difficulties. Now that you rope in the Promontoire hut the demand on one's powers is much less.—J. P. F.

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on the Grande Muraille in 1904, but though pleasant and comfortable for the feet, the additional load of the boots on one's back renders the gain a minus one (+ and − = −). The rock, protogene granite, is so good that it is not easy to slip in properly nailed boots.

As for crampons, if the mountain is in a fit state to climb at all, these are quite unnecessary. On September 13 last the Glacier Carré was hard owing to absence of sun, and showed few traces of steps, but the 10 or 15 minutes crampons might have saved here would have been dearly bought by the extra labour of carrying their clumsy bulk for many hours.

I trust nothing here written will convey the impression that I consider the Meije an easy mountain, to be lightly attacked by inexperienced parties. Though its hardest bits of rock work would not be considered very difficult in the English Lakes, and though its ice work, generally speaking, is easier than what the North Face of Nevis can show in April, the scale on the Meije is very large, *and there are no easy ways down.* There is no great mountain in the Alps whose doors are so easily locked. Young Main and Plossu deserve the greatest credit for their enterprise in opening a new possibility.

The Early Swiss Pioneers of the Alps.

By Dr. H. DÜBI.

(*Continued from p.* 99.)

Hans Caspar Rohrdorf.

HANS CASPAR ROHRDORF, or Rordorf, as he sometimes spells his name, was born at Zürich on August 17, 1773. We know little of his early life, but in 1800 we find him practising as veterinary surgeon at Seebach near Zürich, and in 1805 he qualified as operator and accoucheur. His recent biographer,[1] tells us that in 1811 he made himself guilty of a professional misdemeanour, was imprisoned for some time and banished for six years. After an adventurous life that brought him into the cantons of Thurgau, Glarus and Schwyz, and even to Milan and Florence, he landed at

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[1] Dr. A. Lechner: *Hans Caspar Rordorf (Rohrdorf) aus Zürich und Gottlieb Studer in Bern.* Solothurn, 1915.

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Berne in 1822, where, notwithstanding his past, he was received by Professor Meisner (1765–1825), Professor Trechsel (1776–1849), and Pastor J. S. Wyttenbach (1748–1830), and got an engagement as assistant of the first-named in the Museum of Natural History. By his anatomical and technical abilities he gave satisfaction to his patrons. He must receive credit for the rearrangement of the remarkable geological and ornithological collections that had come to the museum by the care of the pastors Sprüngli and Wyttenbach. Rohrdorf was a good hand at stuffing animals—the new form of the celebrated St. Bernard dog Barry is his work. He was also a hunter and a good shot, but his reputation was always against him. On the death of the former attendant of the museum in 1826, Rohrdorf was elected to his post with the title of 'preparator,' his annual wages being 200 livres (about 290 francs) besides a modest remuneration for extra work. He tried to augment his income by publishing zoological and sporting books, but failed to get the necessary subscribers.[2] His trade in stuffed beasts and birds was not very lucrative. The reliefs of the Bernese Oberland by Weiss and Müller in the museum inspired him with the idea of issuing a new edition of the smaller relief corrected by observation on the spot. In the printed account of his journey [3] Rohrdorf pretends that he was fired by the legend that once a beaten track used for commercial and other purposes led from Grindelwald to the Valais by the Fiescher glaciers, and by the desire to re-open, for the profit of the Oberlanders, this route. Moreover, as the intended passage rounded the foot of the Jungfrau, Rohrdorf decided to climb that peak *en route*. I agree with Dr. Lechner that some of these motives were perhaps fixed *post eventum*, but nevertheless Rohrdorf's enterprise was meritorious, especially as his personal means were small and the Government did not help him much.

Before starting on August 15, 1828, he modelled the smaller relief and took a copy with him to control it on the field. No

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[2] In 1835 and 1836 only he succeeded in publishing a book of that kind: *Der Schweizerjäger*, 2 vols. in 1 tome, Glarus and Liestal (*see* Lechner, pp. 33–5).

[3] Caspar Rohrdorf: *Reise über die Grindelwald-Fiescher-Gletscher auf den Jungfrau-Gletscher und Ersteigung des Gletschers des Jungfrau-Berges.* Bern, 1828.

F. J. Hugi: *Naturhistorische Alpenreise*, Solothurn, 1830; *Ueber das Wesen der Gletscher und Winterreise in das Eismeer*, Stuttgart & Tübingen, 1842.

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doubt he possessed also Meyer's map of 1813, a cut from which is annexed to Rohrdorf's pamphlet. Captain Farrar gave, in 'A.J.' xxx. 280–281, a précis of Rohrdorf's attempt and failure to ascend the Jungfrau and of the successful ascent a few days later by Grindelwald guides led by Peter Baumann. They found no trace of the Meyers' three poles.

Peter Baumann at once reported to Rohrdorf, and a preliminary notice, signed by Rohrdorf, was published in a Bernese magazine: *Der Schweizerfreund* (No. 39, September 23, 1828, pp. 191–2). The editor added a note, taken from the *Gazette de Lausanne*, that contained many topographical errors.

Not free from such, but in other respects interesting, is an account of Rohrdorf's attempt given by Zschokke in *Der aufrichtige und wohlerfahrene Schweizer Bote* (Aarau 1828, No. 28, p. 300). It reads: 'On August 20 two Englishmen[4] tried to climb the summit of the Jungfrau from Lauterbrunnen. Accompanied by nine men they reached a certain height, but attained only the Roththal glacier. The summit remained inaccessible. On August 21 an inhabitant of Berne tried the same, accompanied by chamois-hunters. He mounted from Grindelwald behind the Eiger and Mönch, remained on the attempt for eight days, steady against all obstacles. He gained the ridge connecting the Jungfrau and the Mönch, and planted there a flag that is visible from the Wengernalp, but the summit of the Jungfrau remained inaccessible.' In a second article the *Schweizerfreund* (No. 41, October 7, 1828, pp. 203–4), after referring to the accounts published in the newspapers, continues: 'As these reports differ from each other on several points, and as some of them are infested by considerable errors, some friends of the truth found it convenient to publish the following facts, that agree with the deposition of the daring men who undertook the expedition.' Then follows a description of the events of September 8 to 11, with personal notices about the seven Grindelwalders. At the end of the unsigned article some of Rohrdorf's thermometrical observations are contested. In his reply, inserted in No. 42 of the *Schweizerfreund*, p. 208, dated October 14, Rohrdorf referred his critics to the experiences of the Meyers and other glacier travellers, but in other respects he accepted their remark.

I cannot refrain from putting in here the very curious contemporary gossip about Rohrdorf and his enterprise that a

[4] No doubt this is an allusion to the expedition of Messrs. Brown and Slade, which we shall deal with later.

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Bernese bill-broker, S. Rudolf Walthard, noted in his diary [5] for September 14 and 16, 1828.

'Le nommé Rohrdorf de Zürich, homme d'une réputation très équivoque, et qui a même été banni de sa ville natale, pour délits correctionels, a su se faufiler ici, où il est employé au Musée pour l'empaillage des animaux qu'on y expose, et auquel on a confié la garde des fauves qu'on entretient dans les fossés, a conçu l'idée de monter sur la Jungfrau. Grand parleur, vantard et chasseur aventureux, il a su faire goûter son projet à quelques personnes et nommément au directeur de la police, de Graffenried, et au professeur Schnell, qui l'ont beaucoup encouragé. En conséquence il a fait ses préparatifs et s'est rendu au commencement de ce mois dans l'Oberland, où il a engagé cinq ou six chasseurs de chamois de le suivre et de le guider à travers les glaciers. Ils partirent effectivement, mais après avoir erré près de 7 jours sur ces régions glacées, le mauvais temps les força à rétrograder et à remettre la partie jusqu'aux prochains beaux jours. Ceux-ci se manifestèrent effectivement immédiatement après leur retour, mais Rohrdorf s'étant rendu dans l'intervalle à Berne, les chasseurs de chamois partirent seuls, et atteignirent, mercredi dernier, 10^{me} de 7^{bre}, la cime de cette montagne colossale, que jamais encore un pied d'homme n'avait foulée. Suivant les certificats, qu'ils ont apportés, de plusieurs personnes dignes de foi, ils ont été vus depuis Interlaken, vers les 4 à 5 heures de l'après-midi, plantant un drapeau aux couleurs bernoises, de 18 pieds de hauteur sur le point culminant du sommet. D'après le rapport circonstancié qu'ils ont fait de leur ascension, il se trouva que la cime n'offre proprement qu'une superficie de 15 pieds et se termine absolument en dos d'âne. Le premier des chasseurs qui y monta s'y mit à califourchon et ayant ainsi une jambe pendue vers la vallée de Grindelwald et l'autre vers le Valais, il aplatit avec une hache la croupe saillante et forma un plateau d'environ 5 à 6 pieds de diamètre, sur lequel se placèrent ensuite ses compagnons, et au centre duquel ils enfoncèrent, à la profondeur de 3 pieds, le drapeau, qui a été vu par une multitude de personnes. Ils assurent que l'accès de cette sommité n'est point du tout aussi périlleux qu'on se l'imaginait jusqu'à présent, et ils prétendent que moyennant quelques marches coupées dans la glace aux endroits les plus roides il ne faudra pas même de grands efforts de la part de ceux qui seraient curieux de faire cette ascension.

[5] It was reprinted in Dr. Lechner's pamphlet, pp. 38–40, from a manuscript preserved in the public library of Berne.

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D'après leur rapport ils ont passé la première nuit dans une caverne de rocher, où jaillit une source, et la seconde sous une voûte de roc assez saillante pour les mettre à l'abri des avalanches et de la neige qui pourrait tomber. Le sommet même doit être tout de glace et ne décéler nulle part le moindre vestige de roc ou de terre.

'Les frères Meyer d'Aarau, qui en 1812, avaient tenté l'ascension de cette montagne, depuis le Valais, ont assuré avoir planté un drapeau. Mais comme ce drapeau n'a jamais été vu par personne, malgré que plusieurs curieux se soient donné toutes les peines pour le découvrir avec de longues vues, on a commencé à douter de leur ascension et finalement on s'est convaincu qu'ils en avaient imposé au public. Le fait est que les chasseurs de chamois, qui y sont montés maintenant, n'ont trouvé aucune trace ni aucun vestige qui auraient pu faire supposer que quelqu'un d'autre qu'eux eût atteint ce point culminant de la Suisse. L'honneur doit donc leur en être déféré à juste titre, mais Rohrdorf en révendique une part. Lui revient-elle ?

'(Sept. 16.) Les sept chasseurs de chamois qui sont montés sur la Jungfrau, sont tous de Grindelwald. Ce sont : Christian Roth, âgé de 50 ans. Celui-ci n'est pas monté sur le pic. Pierre Baumann, âgé de 28 ans. C'est lui qui y monta le tout premier et qui nivella la crête avec une hache.

Christian Baumann, âgé de 33 ans.
Pierre Roth, âgé de 35 ans.
Ulrich Wittwer, âgé de 32 ans.
Pierre Moser, âgé de 60 ans.
Hiltbrand Burgener, âgé de 33 ans.

'J'ai vu les certificats, qu'ils ont rapportés et qui certifient qu'on les a vu planter le drapeau et que celui-ci a encore été vu le lendemain. Ces certificats sont signés par une personne d'Interlaken, par un Anglais et par le marquis de Louvois, pair de France ; celui-ci détaille même l'heure et les circonstances de l'ascension du pic, qu'il a observée avec une lunette d'approche. Suivant les rapports de ces chasseurs, ils n'ont vu traces d'êtres vivants dans cette haute région que les pas de chamois et un héron crevé, qui se trouvait à côté d'une caverne. Le ciel leur a paru d'une couleur plus foncée que ne l'est celle qu'on découvre depuis les vallées.'

In that report great stress is laid on the fact that the flag planted on the top of the Jungfrau on September 10 was seen more than once and by several eye-witnesses. Indeed, even from the observatory at Berne it was recognized by Professor

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Trechsel, on October 19, between 4 and 5 P.M., first with the excellent although small Frauenhofer telescope, then, more distinctly, with the 'three feet and half Dollond.' Professor Trechsel published his observation in No. 43 of the *Schweizerfreund* (p. 212), for October 21, 1828, and Rohrdorf did not fail to insert it at the end of his pamphlet.

The Englishman alluded to by Walthard was, probably, the American, John Fenimore Cooper, who, on his return from the Gotthard to the Bernese Oberland, observed the flag from Interlaken.[6]

As there was no longer any doubt about the reality of the ascent, the first from the Bernese side at all events, the Government instructed the bailiff of Interlaken, Joh. Rud. v. Steiger, 'to pay to every of the seven Grindelwalders who, on September 10, ascended the summit of the Jungfrau, a double ducat (about 21 francs) as a sign of our contentment.' The assignation was paid out on September 29, 1828, in the parsonage at Grindelwald.[7]

Poor Rohrdorf never recovered his advance to Christian Roth for the preparations for the ascent, for as late as January 1829 there were 'unsettled financial differences and bitter offence between the Grindelwalders and Rohrdorf.' On November 4, 1828, he advised the public that a description of his 'travel over the Grindelwald-Fiescher glaciers to the Jungfrau glacier and of the ascent of the Jungfrau, carried out in August and September 1828, with a little map and sketches of the Jungfrau from S.E. and of the Lagerberg,' was for sale for 8 batzen (about 1 franc 15 centimes) by the author or by the bookseller C. A. Jenny at Berne. And in December 1828 Rohrdorf deposited in the town hall the original of a relief of that region, modelled by him and corrected on the spot. At the same time he advised the public in his pamphlet (p. 45) that copies of the relief, 15 inches broad and 20 inches long, could be ordered from the author. We shall now examine both publications and the critiques they caused.

In his pamphlet Rohrdorf, after an introduction and a full description of his attempt and of the ascent by the Grindelwalders, gives a summary of the region explored by the Meyers and himself; he adds something to their nomenclature, viz.: the Lagerberg (Trugberg), on which he distinguishes two summits, the *Kamm* on the N.E., the *Zweispitz* on the S.W.,

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[6] See *Excursions in Switzerland*, vol. ii. p. 155.

[7] Studer: *Ueber Eis und Schnee*, 2nd edition, vol. iii. p. 429.

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the *Sattelknopf*[8] on the Jungfraujoch, the Silberhörner, the Klein Mönch (Stellifluh or Schwarze Mönch) and the Rothe Brett. He pretends that the Kamm is visible from Berne just E. of the Sattelknopf. His observations on the glacial phenomena are few and of no great value. He noted his own pulsations, but not those of his men, and assures us that neither on this nor on the many expeditions on high mountains he or his companions ever suffered from nausea or other symptoms of the rarefaction of air, save on heights of over 10,000 feet. Rohrdorf's remarks about nourishment and digestion on high mountains are the first on record, as far as I know, and therefore of some importance. Concerning the lithological constitution of the Jungfrau he prefers the theory of the Meyers and Dr. Ebel to that of Escher von der Linth, and gives some good details about the contact between gneiss and limestone near the summit of the Jungfrau. He supposes that Professor Hugi will correct his opinions. He notes the names of a few alpine plants he found, and of the rare quadrupeds, insects and birds he observed. More useful and interesting is the chapter on equipment and how to handle the alpenstock and the rope. Crampons are not mentioned. The boots should be heavily nailed, with four iron pegs screwed in the soles and with horseshoes on the heels. New, in the roll of things to be provided with, are green spectacles, ointment to anoint the face and hands with, and a pole 15 to 20 feet long, the handling of which is described as follows: The leader of the party fixes in the rock or ice an iron peg; on that he hooks an iron ring attached to the thicker end of the pole. Holding the pole upright with one hand he may hew steps with the other. With this simple instrument, Rohrdorf informs us, he once ascended to the summit of the Glärnisch reputed inaccessible, and he thinks it would be convenient for climbing the Finsteraarhorn. Another invention of his seems the mode of roping. The leader and the last man bind the rope (das Stellseil) round their waists, the others are connected with it by short straps fastened on an iron ring sewed to a leather belt. More similar to the modern form of 'abseilen' is Rohrdorf's method to pull the rope through iron rings fastened on iron pegs rammed in at the beginning and the end of a nasty bit of climbing. A sort of 'abschraubbarer Eispickel' is thus described by Rohrdorf: 'On the head of a wooden stick six feet

[8] P. 3560 of the S. map. See *Climbers' Guide to the Bernese Oberland*, vol. i. pt. i. p. 116. In recent publications this view-point is sometimes called Mathildenspitze. Rohrdorf's denomination deserves to be retained.

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long and provided on the lower end with a strong steel point is screwed in (or permanently fixed) a hook of good soft steel seven inches long, sharp on one side, curved and blunt on the other; the instrument serves for cutting steps as well as to hold on rocks or ice.' As for food Rohrdorf recommends above all a condensed flour soup prepared at home and conveyed in a tin box. For drink he prefers a mixture of hot tea with wine and sugar to the pure wine or brandy, but he is well aware that the transport of fuel is a serious impediment to all cooking luxuries.

At the end of his pamphlet Rohrdorf sums up the results of his travel as follows: (1) The presumed 'Wallis-Pass' is of no commercial importance for the Oberland. (2) All the high summits can be scaled. (3) The way is now open for the students to make scientific experiments on those heights and for the simple tourists and even ladies to climb the Jungfrau for the sake of the view. Rohrdorf offers his services to both. Finally, he proceeds to correct some faults in the smaller relief of the Bernese museum, viz.: the heights of the two Eigers as given are too low; the Lagerberg is not, as the relief and the maps state, connected with the Mönch and lies considerably more to the East.

Rohrdorf's pamphlet was announced in a friendly manner in *Schweizerische Literaturblätter*, Zürich, 1829, pp. 71 sq.,[9] but otherwise it met with bitter criticism. Hugi [10] condemns all Rohrdorf says about the old passage over the Walchergrat and that glacier region as the utterances of an ignoramus. As for his geognostical opinions, the professor rebukes the 'preparator' with the Latin proverb: *Ne sutor ultra crepidam*!

I agree with Professor Lüders [11] that Hugi's judgment is unjust, inasmuch as he omits the real merit of Rohrdorf's expedition. In my opinion it established firmly the following points:

(1) The frontier ridge between the Mönch and the Walcherhorn (3705 m.) can be crossed without excessive exertion or danger; (2) this passage affords the shortest access to the Jungfrau from the Grindelwalder side; (3) the Mönch is not the point of bifurcation of a side spur running S.E. to the Grüneck from the main ridge continuing eastward to the Grindelwalder Fiescherhörner, but is separated from a considerable mountain mass just opposite the Jungfrau by a

[9] Lechner, *loc. cit.*, p. 9, note 2.
[10] *Naturhistorische Alpenreise*, pp. 110–111.
[11] *Jahrbuch S.A.C.*, vol. xliv. p. 288, note 4.

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snowy plain that must be crossed when coming from Grindelwald, to gain the foot of the Jungfrau. These facts were settled by Rohrdorf in his text and on his map, and Hugi was wrong in deciding against all evidence that the legendary pass over the 'Walchergrat' must be sought for more to the E. 'between the two Walcherhörner' [the now called Fieschergjoch], and returning in his map to the erroneous statement of the Meyers.

More useful and interesting is the discussion of Rohrdorf's pamphlet by Gottlieb Studer in a letter dated Lengnau, December 5, 1828, and addressed to Colonel Karl Viktor May (1777–1853).[12] As it is the first time we hear something of a youth destined to become one of the pioneers of alpine climbing, art and historiography, it seems opportune to insert a short sketch of Studer's doings before that date.

Gottlieb Studer, born August 5, 1804, a citizen of Berne, was the son of Gottlieb Sigmund Studer (1761–1808), best known as author of the 'Chaîne d'Alpes vue des environs de Berne' (1788) and other panoramas, and himself a good mountaineer who, with his brother Samuel and Pastor Wyttenbach, first set foot on the Gamchilücke and the Dündenhorn, explored the Gastern- and Kienthal and visited Chamonix and its glaciers. Although the means of the family, after the premature death of its head, were but small, Gottlieb was well educated at Berne and Neuchâtel. He became, like his father, a public notary and served, between 1821 and 1829, as office-clerk in several district towns and in the capital. He began climbing as early as 1823, and continued this sport for sixty years. In 1825 he ascended the Rochers de Culant, a minor summit of the Diablerets and the Pointe de Dronaz, near the Grand St. Bernard, and crossed the Col d'Erraz, between Val d'Entremont and Val de Bagnes. In 1826 he crossed the Jochpass from Engstlenalp to Engelberg, in 1827 the Juchlipass, from Melchthal to Engelberg, the Segnespass, visiting the Martinsloch *en route*, and the Griespass. When he wrote his letter to Colonel May he had already gained his spurs as a map-maker and draughtsman, for he informs us that he gained a silver medal from a Bernese corporation as reward for a map of the prealpine commune of Trub, including the Napf (1411 m.), and had an offer from Dr. Ebel at Zürich to lithograph the panorama of the Calanda and to draw mountain views for the new edition of Ebel's guide book of Switzerland.

[12] The letter is reprinted in Dr. Lechner's pamphlet, pp. 11–13, from the manuscript preserved in the archives of the canton of Berne.

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For his own use he had sketched the views from the above said peaks and passes,[13] and he had just begun to draft the view of the Stockhorn-range, for which purpose he borrowed a map from Colonel May. Thus Studer was well fitted to judge Rohrdorf's work. His criticism hits, besides minor points, on the following defects: (1) To call the summit of the Jungfrau a 'Gletscher' is absurd. (2) 'Lagerberg' is not a convenient name for a rocky mass covered on its flanks with snow and ice; new denominations should be adapted to the nature of the object (!). (3) How can Rohrdorf propose to guide even ladies by an easier way to the top of the Jungfrau, while he was not able to reach it himself by the ordinary route? (4) It is not possible to see the summit of the Lagerberg from Berne, and indeed nothing is visible behind the arête connecting the Jungfrau with the Mönch.[14] (5) The presumption that the depth of the Jungfrau glacier may be equal to that of the Lauterbrunnen valley is wholly unjustified. (6) Rohrdorf offers no proof for his statement that all our ice-covered mountains are accessible. Why does he not try to climb the Matterhorn, the Monte Rosa, etc.? (7) How can Rohrdorf know that on the smaller relief in our museum the two Eigers are too low, as he did not measure their heights? (8) As a copy, the map in Rohrdorf's pamphlet is not badly done, but one would prefer a map on a larger scale, comprising only the region travelled by Rohrdorf, especially the upper part of the Grindelwald-Fiescher glacier and the pass leading over it. (9) The two outlines ('Profilzeichnungen') are very poor in every respect. No. 4 is more probably the Gletscherhorn than the Ebnefluh.[15] Studer sums up his critique by

[13] They are still preserved in the library of the section of Berne S.A.C.

[14] Studer was quite right. My son Hans, engineer of the Federal survey, writes to me about the matter: 'Seen from Berne, the top of the Trugberg, 3933 m., and nearly its whole summit ridge is masked by the broad Mönch, 4005 m. A line Berne-Jungfraujoch-Trugberg hits the latter at its S.W. foot, *i.e.* near P. 3050, and, if prolonged, crosses the centre of the Concordiaplatz, touching the arête of the Wannehorn only between the Klein Wannehorn and the Märjelen lake. Thus no summit whatsoever is visible from Berne behind the Jungfraujoch.'

[15] Here also Studer seems right. No doubt he took that detail from the appendix his father added to the *Raritätenkasten von Lauterbrunnen* (about this curious MS. see *Climbers' Guide to the Bernese Oberland*, vol. i. pt. i. p. xiv.), but the name is a fruit of Studer's first visit to Lauterbrunnen in 1827.

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crediting Rohrdorf with the merit to have opened the way for people more capable of exact observations. I think we can subscribe to his judgment.

In his ' Alpenstock ' (London, 1829), p. 49 ss., Charles Joseph Latrobe gives a very readable extract of the mountaineering part of Rohrdorf's pamphlet, and from Latrobe's text Rohrdorf's enterprise was made known to the public by others.

Rohrdorf not only offered to sell to the Government his relief, but he proposed to continue the work and to extend it over the whole Oberland. The Government, on December 28, referred the matter to the curators of the Academy,[16] and they, on December 31, directed the professors Trechsel and Bernhard Studer[17] to report on the relief. The report was sent in on January 21, 1829.

The reporters did not recommend the proposed continuation of the work.

On February 12, 1829, the curators forwarded this report, approved by themselves, to the Government. On February 20, the treasurer of state was ordered to pay to Rohrdorf a remuneration of 45 francs, but otherwise his offers were refused. The only relief by Rohrdorf I know of is at Zürich.[18]

Towards the end of 1830 Rohrdorf left Berne and returned to Zürich, where he acted again as surgeon. But a second time he came in conflict with the penal code, and ended miserably, a ruined old man, in an almshouse at Zürich, on April 23, 1843.[19] He left a son, Konrad Caspar, born November 26, 1800, who gained some reputation as an engraver,[20] reached the rank of lieutenant-colonel at Liestal, and was killed in the assault on Mexico city in September 1847.

Report of the Official Enquiry into the Accident on the Mont Cervin, in July 1865.

SÉANCE du juge instructeur du district de Viège, tenue à Zermatt, à l'hôtel du Mont Cervin, sous la présidence de Mr. le juge d'instruction Joseph Antoine Clemenz, à Viège, rapporteur substitu César Clemenz, greffier Donat Andenmatten à Viège, et huissier ad hoc Jean Julen, le 21 juillet 1865.

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[16] See Lechner, pp. 28–9.

[17] Bernhard Studer (1794–1887), the famous geologist and friend of Professor Forbes, was the son of Samuel Studer (1757–1834; see above) and cousin of Gottlieb Studer.

[18] *Bibliographia der Schweizerischen Landeskunde*, fascikel ii. p. 412.

[19] Lechner, pp. 30–37.

[20] *Schweizerisches Künstlerlexikon*, pp. 668–9.

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MONSIEUR WIMPER, TOURISTE.

Question 1.—Quel est votre nom, âge, condition, et votre domicile ?

Réponse.—Edouard Whimper, 25 ans, domicilié à Londres, artiste dessinateur, pas marié.

Q. 2.—Avez-vous fait partie de l'expédition qui a eu lieu le 13 courant aux fins d'opérer l'ascension du Mont Cervin ?

R.—Oui.

Q. 3.—De combien de personnes a été composé le personnel de cette expédition ?

R.—A partir de Zermatt nous étions 8 personnes, savoir 4 voyageurs, 2 guides et deux porteurs. Un des porteurs, fils de Pierre Taugwalder, est reparti pour Zermatt le 14 au matin de l'endroit où nous avons pris le quartier de nuit.

Q. 4.—Quel est le nom des 4 voyageurs, des deux guides et du porteur ?

R.—Rev. Charles Hudson, M. Hadou, Lord François Douglas, et moi-même ; guides : Michel Cropt de Chamonix, Pierre Taugwalder, père, de Zermatt ; et porteur : Pierre Taugwalder fils.

Q. 5.—Quel est le domicile de Mr. Douglas, Hudson et Hadou ?

R.—Mr. Hudson a été vicaire à Skillington, Angleterre, le domicile des autres m'est inconnu.

Q. 6.—A quelle heure vous-êtes partis le 14 pour continuer votre chemin pour arriver à la pointe du Mont Cervin ?

R.—Nous sommes partis de notre quartier du 13 au 14 à 3.40 du matin.

Q. 7.—A quelle heure êtes-vous arrivés au sommet du Mont Cervin ?

R.—A 1.40 de l'après-midi.

Q. 8.—Combien de temps avez-vous séjourné au sommet du Mont Cervin ?

R.—Une heure.

Q. 9.—Est-ce que vous avez pris en descendant la même direction qu'en montant ?

R.—Exactement la même.

Q. 10.—Est-ce que les 4 voyageurs et les guides ont été liés par des cordes entre eux ?

R.—Oui, dans l'ordre et conditions suivantes : à la tête de la colonne a été le guide Michel Cropt, venait ensuite M. Hadou, Hudson, Lord Douglas, Taugwalder père, guide, moi-même, et enfin Taugwalder fils. Entre Lord Douglas et Taugwalder père la corde a été moins épaisse qu'entre Michel

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Cropt et Lord Douglas d'un côté, et Taugwalder père et Taugwalder fils de l'autre côté.

Q. 11.—De quelle manière est arrivée la malheureuse catastrophe ?

R.—Nous descendions dans l'ordre indiqué plus haut. A une distance d'environ 300 p. du sommet nous arrivions à un endroit difficile composé de rochers et de neige. Pour autant que je sache au moment où l'accident eut lieu, M. Hadou était le seul qui fut en mouvement. Ce même M. Hadou éprouvait évidemment beaucoup de difficultés à faire la descente et Michel Cropt pour plus de sécurité prenait et plaçait lui-même l'un après l'autre les pieds de M. Hadou. Je ne saurais dire avec certaineté qu'elle était la véritable cause de l'accident. Mais je crois que Michel Cropt avait placé les pieds de M. Hadou sur des points de rochers et venait de se retourner pour faire un pas en avant lui-même lorsque M. Hadou glissa, dans sa chute renversa Michel Cropt. Ce double poids entraîna M. Hudson et après lui Lord Douglas. Les quelques instants que cela dura donnaient temps aux 3 qui étaient en arrière de prendre pied ferme, si bien en effet que la corde se brisa entre Lord Douglas et Taugwalder père. Pendant 2 ou 3 moments nous vîmes les 4 malheureux glisser sur le dos et tendre les mains pour se sauver et puis ils disparurent entièrement. Pas un cri n'a été entendu, après le premier cri de surprise poussé par Michel Cropt. Moi-même et les 2 Taugwalder nous sommes descendus sans autre accident par le même chemin que nous étions montés usant de toute la prudence possible et cherchant partout des traces de nos malheureux compagnons. Mais nous n'avons vu que deux haches enfoncées dans la neige. Par suite de ces précautions et de ces recherches nous fûmes surpris par la nuit à une hauteur d'environ 13.000 pieds anglais. Là nous prîmes quartier sur une espace d'environ 12 pieds de superficie et le lendemain matin samedi le 15 nous nous remîmes en route, arrivant à Zermatt à 10½ h. du matin.

Q. 12.—N'êtes-vous pas remontés au pied du Mont Cervin pour chercher les malheureuses victimes de cet accident ?

R.—Oui, dimanche matin le 16 crt.

Q. 13.—Etiez-vous seul ou étiez-vous en compagnie ? Dans le cas que vous n'étiez pas seul, veuillez désigner les personnes qui vous ont accompagné ?

R.—J'étais accompagné du Rév. Joseph McCormick, ami de M. Hudson, ainsi que du Rév. Mr. Robertson et de M. Phillpots, et des guides Lochmatter Alexandre et un des frères Maurice Andenmatten de Saas, François Payot de

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Chamonix et un autre guide de Chamonix dont le nom m'est inconnu.

Q. 14.—Avez-vous trouvé les 4 victimes ?

R.—Seulement les cadavres de trois ; savoir : M. Hudson, M. Hadou, et Michel Cropt.

Q. 15—N'avez-vous pas donné connaissance à l'autorité de la commune de Zermatt que vous avez retrouvé les cadavres de 3 victimes ?

R.—Non, pas officiellement, mais à mon retour à Zermatt le samedi matin, j'ai donné connaissance du triste accident au président de la commune de Zermatt le priant en même temps d'envoyer des hommes sur le lieu de la catastrophe ; en cas qu'après tout l'un ou l'autre de mes malheureux compagnons fût encore en vie. Cette demande fut accordée et bon nombre des guides se mirent aussitôt en route. Ils revinrent six heures plus tard, disant qu'ils avaient entrevu les cadavres, mais qu'il est impossible de parvenir jusqu'à eux ce jour. D'un autre côté ces mêmes guides de Zermatt refusèrent en masse d'aller à la recherche des cadavres le lendemain dimanche, et c'est pour cela même que je me mis en route sans autorité officielle pour retrouver les cadavres et qu'à mon retour je ne crus pas devoir faire un rapport officiel. Cependant le fait que 3 des cadavres avaient été retrouvés fut communiqué non officiellement à quiconque prenait intérêt dans cette triste affaire.

Q. 16.—Est-ce que vous n'avez pas trouvé des traces de Lord Douglas ?

R.—J'ai rencontré une paire de gants que je lui avais donnée moi-même à Zermatt et la ceinture de cuir qu'il portait pendant l'ascension.

Q. 17.—Avez-vous à votre déposition quelque chose à changer ou à ajouter ?

R.—J'ajouterai qu'à partir du 14 au matin Taugwalder fils qui nous avait d'abord accompagné comme porteur, nous servit de guide.

Le protocole prélu et approuvé,
(Sig.) Edouard Whymper.

Le même jour et par devant les mêmes :

Interrogatoire de Pierre Taugwalder, Père
[translated from the German].

Q. 18.—D'usage.

R.—Je m'appelle Pierre Taugwalder, 45 ans, marié, guide de montagne, domicilié à Zermatt.

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Q. 19.—Avez-vous fait l'ascension du Mont Cervin, le 14 ct.?
R.—Oui.
Q. 20.—En quelle qualité avez-vous fait cette ascension ?
R.—En qualité de guide de montagne.
Q. 21.—Qui vous a engagé comme guide pour cette ascension?
R.—Lord Douglas et Whymper.
Q. 22.—Avant l'ascension du Mont Cervin, avez-vous déjà fait des excursions dans la montagne avec Lord Douglas ?
R.—Oui, j'ai accompagné Lord Douglas comme guide à Zinal et sur le Gabelhorn.
Q. 23.—Avant le départ (pour l'ascension du Mont Cervin) avez-vous été informé des personnes qui devaient prendre part à la course, et avez-vous fait des observations, soit contre l'un ou l'autre des participants, soit contre le nombre disproportionné entre touristes et guides ?
R.—On m'a bien dit de combien de personnes la caravane se composait. Je n'ai pas fait d'observations contre les personnes de la caravane. Toutefois, je faisais remarquer que, proportionnellement aux touristes, il y avait trop peu de guides. MM. Whymper et Hudson me répondirent qu'ils marchaient aussi bien que des guides, sur quoi, je ne fis plus d'observations.
Q. 24.—Qui a attaché les personnes avant la descente du sommet ?
R.—Les 4 premiers hommes de la caravane, composée du guide Cropt, Hadou, Hudson et Lord Douglas, ont été attachés par le guide Cropt, et je me suis attaché à Lord Douglas par une corde spéciale.
Q. 25.—Qui a été accordé le premier ?
R.—Je ne me rappelle plus bien qui a été attaché le premier à la corde par Cropt.
Q. 26.—De quelle qualité était la corde employée à cet effet ?
R.—La corde à laquelle étaient attachés Cropt et les 3 touristes était une corde tout à fait neuve et solide.
Q. 27.—Qui vous a attaché à Lord Douglas ?
R.—C'est moi-même.
Q. 28.—Pourquoi a-t-on employé une autre corde entre Lord Douglas et vous ?
R.—Parceque la première corde n'était pas assez longue pour pouvoir m'y attacher.
Q. 29.—La corde employée entre Lord Douglas et vous était-elle, suivant vous, assez solide ?
R.—Si j'avais trouvé que la corde employeé entre Lord Douglas et moi n'était pas assez solide, je me serais bien gardé

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de m'attacher avec elle à Lord Douglas, et je n'aurais pas voulu le mettre en danger, pas plus que moi-même. Si j'avais trouvé cette corde trop faible, je l'aurais reconnue comme telle avant l'ascension du Mont Cervin et je l'aurais refusée.

Q. 30.—Donnez-nous des détails sur l'endroit où l'accident est arrivé ?

R.—Etant descendu jusqu'à environ 200 à 300 pieds du sommet du Mont Cervin, nous sommes arrivés au second des plus dangereux endroits où la montagne ne présente que des parois lisses et où il est très difficile de prendre pied. C'est là que le premier touriste après le guide Cropt glissa et entraîna les suivants et ceux-ci ensuite entraînèrent le guide Cropt, après que la corde entre Lord Douglas et moi ait été brisée.

Q. 31.—Estimez-vous que toutes les précautions ont été prises à cet endroit ?

R.—Oui. Il est toutefois regrettable que la première personne après Cropt était un très mauvais grimpeur.

Q. 32.—Comment l'accident s'est-il produit ?

R.—Je l'ai dit ci-dessus, mais j'ajoute qu'après la rupture de la corde entre Lord Douglas et moi, M. Whymper, moi et mon fils, nous sommes restés à cet endroit, d'où nous cherchions à sortir le plus tôt possible. Nous sommes descendus afin de trouver un endroit pour y passer la nuit. Le lendemain matin, nous sommes arrivés sains et saufs à Zermatt.

Q. 33.—Au moment de la chute des touristes, la corde était-elle tendue ou non ?

R.—Elle était tendue.

Q. 34.—Quelle est votre opinion sur la rupture de la corde ?

R.—Je ne puis le dire, mais le poids des trois personnes avec la force de leur chute aurait pu briser une corde bien solide.

Q. 35.—Etait-il possible de retenir les 4 hommes après la rupture de la corde ?

R.—Impossible.

Q. 36.—Si la corde entre vous et Mr. Douglas ne s'était pas brisée, auriez-vous pu sauver les touristes ?

R.—J'ai la ferme conviction que, si la corde ne s'était pas brisée entre Lord Douglas et moi, avec l'aide du guide Cropt, j'aurais pu sauver les touristes.

Lu et confirmé,

PIERRE TAUGWALDER.

Le Juge d'instruction,

CLEMENZ.

Le Greffier ad hoc,

DONAT ANDENMATTEN.

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Le même jour et par devant les mêmes :

INTERROGATOIRE DE FRANÇOIS JOSEPH ANDENMATTEN [translated from the German].

Q. 37.—D'usage.

R.—Je m'appelle Franz Andenmatten, 40 ans, marié, guide de montagne, domicilié à Almagel.

Q. 38.—N'êtes-vous pas allés, ces derniers jours, en compagnie d'autres guides, dans la vallée de Zmut à la recherche des personnes, victimes de l'accident au Mont Cervin ?

R.—Oui, deux fois. La première fois je suis allé avec 4 autres guides et accompagné de 4 Messieurs, et nous avons trouvé tout de suite 3 victimes. Ces trois se trouvaient sur une plaine de neige où sur une grande distance il n'y a ni abîmes ni couloirs.

Q. 39.—Où croyez-vous que le corps de la quatrième victime pourrait bien se trouver ?

R.—Probablement, il est resté plus haut dans les rochers.

Q. 40.—Quel est le nom des Messieurs qui sont venus avec vous la première fois ?

R.—Maac Cormick, Whymper, Robertson, Philpots.

Q. 41.—Qu'avez-vous fait des 3 corps ?

R.—Je me trouvais seul à une certaine distance des victimes; je crois qu'on les avait réunies et couvertes de neige. La seconde fois, j'y suis allé pour ramener les victimes.

Q. 42.—Quels guides étaient avec vous la première fois ?

R.—Alexandre et Joseph-Marie Lochmatter et deux guides de Chamoni, dont un s'appelle Payot, le nom de l'autre m'est inconnu.

Le comparant ne sait pas signer.

Le Juge d'instruction,
CLEMENZ.
Le Greffier ad hoc,
DONAT ANDENMATTEN.

Suite le 22 juillet, au même lieu et par devant les mêmes.

INTERROGATOIRE D'ALEXANDRE LOCHMATTER [translated from the German].

Q. 43.—D'usage.

R.—Je m'appelle Alexandre Lochmatter, 27 ans, célibataire, guide de montagne et horloger, domicilié à St. Nicolas.

Q. 44.—N'êtes-vous pas allés, en compagnie de plusieurs

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Messieurs et guides, au pied du Mont Cervin à la recherche des 4 victimes ?

R.—Oui.

Q. 45.—Combien de victimes y avez-vous trouvé ?

R.—Nous en avons trouvé trois.

Q. 46.—Savez-vous le nom de la victime que l'on n'a pas retrouvée ?

R.—Oui, ces Messieurs m'ont dit que c'était Lord Douglas.

Q. 47.—Les trois victimes, étaient-elles ensemble ou séparées ?

R.—Elles étaient tout près l'une de l'autre.

Q. 48.—N'a-t-on pas mis ensemble les trois corps et couvert de neige ?

R.—Oui.

Q. 49.—Etait-ce dans l'intention de les y laisser ?

R.—Oui, comme mes compagnons, je les croyais y enterrés, d'autant plus que le pasteur anglais a récité des prières d'un livre.

Q. 50.—N'avez-vous pas trouvé de traces de Lord Douglas, soit de son corps, soit de ses vêtements ?

R.—Rien, que je sache.

Q. 51.—A quel endroit, croyez-vous, que Douglas pourrait être retrouvé ?

R.—J'estime que ce doit être dans la partie rocheuse, car il n'a pas pu tomber plus bas que ses compagnons.

Q. 52.—Les trois corps n'ont-ils pas été fouillés et ne trouvait-on pas d'objets sur eux ?

R.—MM. Whymper, Robertson et le pasteur ont fouillé les corps et pris possession des objets qui se trouvaient sur eux.

Lu et confirmé,

ALEXANDRE LOCHMATTER.

Le Juge d'instruction,
J. A. CLEMENZ.
Le Greffier ad hoc,
DONAT ANDENMATTEN.

Séance du Juge instructeur du 23 juillet au même lieu et par devant les mêmes :

SECOND INTERROGATOIRE DE PIERRE TAUGWALDER
[translated from the German].

Q. 53.—Depuis votre dernière déposition, vos souvenirs sur l'accident au Mont Cervin ont-ils changé ; avez-vous quelque chose à ajouter ou à modifier à votre première déposition ?

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R.—Rien, sinon que j'ai dit au guide Cropt, avant d'arriver au passage dangereux, qu'on devrait pour plus de sûreté tendre une corde. Cropt m'a répondu que cela n'était pas nécessaire.

Q. 54.—Votre fils a-t-il connaissance de quelle manière l'accident est arrivé ?

R.—Je ne le crois pas, car il m'a demandé à ce moment : vous êtes encore là, mon père ?

Q. 55.—Comment se fait-il qu'entre Cropt et vous se trouvaient 3 Messieurs, par contre entre vous et votre fils seulement un. Le juge d'instruction est d'avis que cette répartition n'était pas bien rationnelle ; qu'en dites-vous ?

R.—Le premier de la caravane était le guide Cropt, vint ensuite Hadou, puis Hudson, qui se donnait comme guide, suivaient alors Lord Douglas, moi, Whymper et mon fils, Si le juge d'instruction admet que Hudson faisait fonction de guide, vous voyez que chaque touriste était entre deux guides.

Q. 56.—Est-ce que la caravane considérait Hudson comme guide ?

R.—Hudson disait lui-même qu'il n'avait pas besoin de guide et qu'il pourrait faire fonction de guide.

Q. 57.—Qui a fourni la corde qui vous attachait à Lord Douglas ?

R.—La corde a été fournie par MM. les touristes.

Q. 58.—Votre fils était-il engagé comme guide ou comme porteur ?

R.—Le premier jour comme porteur, le second jour comme guide. Au commencement, ces Messieurs voulaient renvoyer mon fils, prétendant que Cropt et moi suffisaient comme guides. Sur mes instances, de prendre mon fils comme guide, ces Messieurs ont accepté ensuite ma proposition.

Q. 59.—A quelle heure êtes-vous partis de Zermatt, le 13 ?

R.—Entre 5 et 6 heures du matin.

Q. 60.—A quelle heure êtes-vous arrivés à l'endroit où vous avez passé la nuit ?

R.—Vers 12 heures du jour.

Q. 61.—A quelle heure êtes-vous repartis le 14 ?

R.—Vers les 2 heures ; nous nous sommes arrêtés un peu plus d'une demi heure. Ces Messieurs étaient de bonne humeur et poussaient des cris de joie.

Q. 63.—Dans sa déposition, Mr. Whymper a déclaré que c'est Hadou qui aurait glissé le premier et entraîné le guide Cropt et ces deux auraient ensuite entraîné Hudson et Douglas. Pendant cet intervalle, lui, Whymper, et les guides Taugwalder père et fils, auraient eu le temps, de prendre pied. A ce

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moment, la corde se serait brisée entre Douglas et Taugwalder. Dans votre réponse à la question 30, vous avez dit que Hadou aurait glissé le premier, puis Hudson et Lord Douglas et ensuite seulement le guide Cropt. Comme la déposition de Mr. Whymper et la vôtre ne sont pas tout à fait conformes, vous êtes invités à déclarér si vous maintenez votre première réponse ?

R.—Comme Mr. Whymper se trouvait au dessus de moi en un endroit d'où il pouvait se rendre compte de ce malheureux accident, sa déposition pourrait bien être plus précise, de sorte que je ne veux pas prétendre plus longtemps que Cropt soit tombé après les trois autres touristes. Tout se passa dans un clin d'œil et nous étions tellement surpris qu'il est pour ainsi dire impossible de bien se rendre compte de l'accident.

Q. 64.—Avez-vous quelque chose à ajouter ou à modifier à vos dépositions qui précèdent ?

R.—J'ajoute que, pour me maintenir plus solidement, je me suis tourné contre la montagne, et comme la corde entre Whymper et moi n'était pas tendue, j'ai pu heureusement la rouler autour d'une saillie de rocher, ce qui m'a donné la force nécessaire pour me sauver. La corde qui m'attachait à Douglas et les autres personnes m'a donné par la chute de telles secousses que je suis bien souffrant à l'endroit où la corde a passé mon corps.

Lu et confirmé,
PIERRE TAUGWALDER.

Le Juge d'instruction,
CLEMENZ.
Le Greffier ad hoc,
DONAT ANDENMATTEN.

La Commission d'enquête pour le district de Viège composée du Juge d'instruction Joseph-Antoine Clemenz et du greffier C. Clemenz, les deux domiciliés à Viège, a porté la décision de non lieu suivante dans l'enquête instruite d'office concernant l'accident survenu à l'occasion d'une ascension du Mont Cervin.

FAITS.

Le 13 juillet, à 5 heures du matin, une caravane composée de MM. Lord Douglas, Hudson, Edouard Whymper et Hadou et des guides Michel Cropt de Chamonix, Pierre Taugwalder, père et fils, les deux de Zermatt, est partie de Zermatt pour tenter l'ascension du Mont Cervin. Le 13 au soir, ils passèrent

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la nuit au pied de la montagne. Le lendemain, ils quittèrent leur abri de nuit à 3 heures 40 du matin et arrivèrent à une heure 40 au sommet de la montagne. Pour la descente, ils suivaient le même chemin qu'ils avaient pris pour l'ascension, et ils étaient attachés dans l'ordre suivant: A la tête de la colonne se trouvait le guide Cropt; venaient ensuite Hadou, Hudson, Lord Douglas, Taugwalder, père, Whymper et Taugwalder, fils. A une distance d'environ 300 pieds au dessous du sommet, ils arrivaient à un endroit rocheux couvert de neige, et où il était difficile de prendre pied. A la traversée de cet endroit dangereux, M. Hadou glissa et entraîna dans sa chute le guide Cropt. Ce double poids entraîna aussi Hudson et ensuite Lord Douglas. Pendant le court instant que dura cet événement, les suivants avaient le temps de prendre pied et cela si bien que la corde entre Lord Douglas et Taugwalder père se brisa. Les survivants descendirent ensuite avec toutes les précautions possibles et arrivèrent sans autre accident à Zermatt, le samedi 15, à 10 heures 1/2, après avoir passé la nuit du 14 au 15, à une hauteur de 13.000 pieds anglais, sur un pan de rocher d'environ 12 pieds de superficie.

Considérant:

1. que des faits ci-dessus il ne résulte aucun acte délictueux;
2. que Mr. Hadou a occasionné l'accident;

que de l'exposé des faits qui précède personne ne peut être accusé d'une faute ou d'un délit,

Il est décidé:

Il n'y a pas lieu de donner suite à la présente enquête, par contre il est porté une décision de non lieu avec frais à la charge du fisc.

INVENTAIRE DES OBJETS APPARTENANT À M. HADOU,

dressé le 22 juillet à Zermatt, au domicile de M. le capitaine Alexandre Seiler, Hôtel Mont-Rose, par ordre du ministère public représenté par le rapporteur-substitut César Clemenz, par M. le juge de district Alois Biner, de Randa, assisté du greffier ad hoc Donat Andenmatten.

1. Billet circulaire 1 à 10 L.W.St. . ff. 250.00
2. Napoléon d'or 14 à 20 fr. . . 280.00
3. Monnaie 2.70
4. Deux bagues en or.
5. Un porte-monnaie, avec une montre en argent et une chaîne en or.

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Les objets ci-dessus ont été déposés par la victime Hadou, avant l'ascension du Mont Cervin, chez l'hôtelier Seiler.

6. Dans les poches du corps, M. le pasteur et ses amis ont trouvé : des lunettes (conserves).

INVENTAIRE POUR M. HUDSON.

1. Un billet de banque anglais de fr. cent vingt cinq . . . . . ff. 125.00
2. Six L. St. de fr. cent cinquante . 150.00
3. Deux Napoléons de fr. vingt, un de fr. cinq 45.00
4. Porte-crayon en argent.

Les objets ci-dessus ont été déposés chez l'hôtelier Seiler par M. Hudson avant sa malheureuse ascension du Mont Cervin.

Dans les poches de la victime ont été trouvés les objets suivants :

(*a*) Une montre en or, brisée, marquant 3 heures ¾.
(*b*) Deux couteaux de poche.
(*c*) Une chaîne de montre en or.
(*d*) Une pièce de deux fr.

Dans une malle se trouvent un sac de voyage, des livres de voyage, des habits et des brosses à cheveux, des cartes et des effets d'habillement appartenant aux victimes Hadou et Hudson et à leur compagnon de voyage Campbel.

Les objets ci-dessus mentionnés et inventoriés, appartenant à MM. Hadou et Hudson ont été remis à M. le pasteur Cormick, qui se porte personnellement fort vis-à-vis du tribunal, pour la remise intégrale.

Zermatt, le 22 juillet 1865.

JOS. MCCORMICK,
English Chaplain at Zermatt.

INVENTAIRE POUR MICHEL CROPT.

Trouvé sur le corps :

1. en or, cent vingt-cinq francs . . ff. 125.00
2. trois pièces de deux francs . . 6.00
3. en monnaie, trois francs et trente un cts. 3.31

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Avant l'ascension, M. Cropt a déposé chez l'hôtelier Seiler :

(*a*) 1 chemise en flanelle.
(*b*) 1 paire de bas en laine.
(*c*) 1 portefeuille.
(*d*) 1 ceinture.
(*e*) indiqué ci-dessus.

Les objets ci-dessus mentionnés appartenant à la victime Michel Cropt ont été remis à l'hôtelier Alexandre Seiler, qui se porte personnellement fort pour leur conservation et leur entretien, et qui signe le présent inventaire.

Zermatt, le 22 juillet 1865.

Les objets mentionnés dans l'inventaire ci-dessus ont été remis au frère Jean-Baptiste Cropt.

Zermatt, le 23 juillet 1865.

CROPT JEAN-BAPTISTE.

INVENTAIRE DES EFFETS DE LORD DOUGLAS,

dressé à Zermatt, à l'hôtel de M. le Conseiller d'Etat J. A. Clemenz, Hôtel Mont Cervin, le 22 juillet 1865, par ordre du ministère public représenté par M. le rapporteur-substitut César Clemenz, par M. le juge de district Alois Biner, à Randa, assisté du greffier ad hoc soussigné Donat Andenmatten, à Viège.

1. 1 portefeuille contenant diverses correspondances et un billet de banque anglais de 10 L.St. soit . . . ff. 250.00
et un même de 5 L.St. soit . . . 125.00
plus une pièce de un franc . . . 1.00

2. 1 sac de voyage contenant :

(*a*) 1 palteau.
(*b*) 1 chemise flanelle.
(*c*) 1 paire de bas blancs.
(*d*) 1 paire de guêtres en cuir.
(*e*) 1 paire de pantoufles.
(*f*) deux livres de voyage.
(*g*) carte.
(*h*) 1 paire de ciseaux.
(*i*) petite boîte avec onguent.
(*k*) instrument pour défaire les nœuds.
(*l*) petite boîte avec des pillules.
(*m*) brosse à dents et à cheveux et des peignes.
(*n*) 1 paire de bas gris en laine et gants.

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A l'endroit où on a retrouvé les corps de Hadou, Hudson et Cropt, on a également trouvé un soulier que l'on attribue à Lord Douglas et qui est cassé, ainsi qu'une manche déchirée du paletot de la même personne.

Zermatt, le 22 juillet 1865.

Le Juge de district,
ALOIS BINER.
Le Greffier ad hoc,
DONAT ANDENMATTEN.

After fifty-five years, thanks to the indefatigable research of Mr. Montagnier, the Minutes of the Enquiry into the most momentous accident which has happened in the Alps are at last available.

There is remarkably little in them, and they throw practically no further light on the matter.

Whymper's evidence corresponds, so far as it goes, with the fuller account given in 'Scrambles.' The chief interest must, of course, be looked for in the evidence of the guide Peter Taugwalder, père, a man of very considerable experience. His answers strike me as frank, to the point, and as indicating singular intelligence.

His answers 24 to 29 bear upon the question of the rope which broke between himself and Douglas. He maintains that he considered it of sufficient strength for the purpose. This is difficult to reconcile with Mr. Whymper's statement, 'It was not brought, and should not have been employed, for the purpose for which it was used.' It must not be forgotten that Mr. Whymper spoke practically no German, and understood probably only the bare words such as 'schnell' and 'langsam,' in regular use on a mountain. His knowledge of French was not extensive. Old Peter's knowledge of French did not exceed Mr. Whymper's knowledge of German. Young Peter spoke and understood French fairly, as he had been in service in the Canton de Vaud. These facts explain a certain disjointedness which strikes one as existing in the relations between guides and traveller.

Taugwalder's answer 28 is peculiar. The rope connecting the four men, Croz, Hadow, Hudson, and Douglas, was either 200 or 150 feet long (cf. my article, 'A.J.' xxxii. 29), yet he says it was not long enough for him to tie on to.

Now in those days, and even later, 80 feet was considered

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enough for four men,[1] so that if, as Taugwalder asserts, none of the rope of the four first descending men remained, they must have been tied up at intervals of 60 or 45 feet, according to which rope had been used. This is not very probable, but where the rest of the rope was if not so used is difficult to say. Whymper alludes to 'the suspicious fact' that this weaker rope was used by Taugwalder, and there is some justification for the words, since it was *only between old Peter and Douglas* that it was used, and old Peter's explanation, given above, is at least open to question. At the same time, as I pointed out in my article ('A.J.' xxxii. 28), Taugwalder did not necessarily understand that the rope given to him to carry was not for ordinary use.

Mr. Whymper's statement ('Scrambles,' 5th edit., p. 392, note 1) that 'there was abundance of new and much stronger rope to spare' is not justified, since one of the other two ropes was with him and young Taugwalder on the summit, and the other, according to old Peter, had been used by the four leading men.

Old Peter's answer 28 is not satisfactory, but at the same time he cannot be fairly accused, still less convicted, of adopting, deliberately, a course tending to save himself at the cost of four other men, one of whom, Douglas, was his immediate employer, with whom he had made other expeditions and to whom he seems to have been sincerely attached.

His answer 30 states that Croz only gave way when the three travellers dragged him down, but he does not maintain this statement which is in itself not improbable, in face of Mr. Whymper's contradiction (see answer 63).

His answer 36 is remarkable. He claims that but for the breakage of the rope between himself and Douglas he, *with the aid of Croz*, could have saved the party.

I certainly do not see what aid Croz, who in the order of descent was in the very place where he was least able to render any aid, could have given, but it is quite possible that Hudson, backed up solidly by the four men behind him, would not have been dragged from his footing, and could have held the other two.

There is one statement of Whymper's in this connexion which I deliberately passed over in my article above referred to, viz. that 'the rope was not taut from him [Hudson] to

[1] The much more difficult work undertaken by the present-day climbers demands a much longer rope, so as to give each man more scope to gain a safe stand.

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Hadow.' This statement does not appear in the present evidence, and his letter dated 'Interlachen, July 25, 1865,' a copy of which is before me, says merely, 'I cannot but think that had the rope been tight between those who fell as it was between myself and Taugwalder,' &c.

Now Whymper himself states that 'the two leading men were partially hidden from my sight by an intervening mass of rock,' and it may well be assumed that he had none too clear a view of Hudson, the third man.

To my mind it is *inconceivable* that Hudson, admittedly an experienced mountaineer, not a mere guide follower, should have had a trailing rope between himself and young Hadow, for whom he seemed to assume a particular care. What he doubtless did was to seek the best stand he could find so as to be ready to check any slip—that part of the mountain, which I have gone across or close to five times,[2] offers few good stands—and this involved his closing up to Hadow. Whymper *jumped to the conclusion* that the rope was consequently not taut between them. But *Hudson's back would be to Whymper, and would obstruct Whymper's view.* What Hudson undoubtedly did—and which of us has not in similar circumstances done the like?—was to hold Hadow on a *short, taut* rope. The weight of the two falling men, Croz and Hadow, the rope between whom was, certainly, wholly loose, was too much for the resistance of Hudson, stout mountaineer though he was, who can have received very slight support from the light eighteen-year-old Douglas.

Taugwalder's answer 64 states that the rope between himself and Whymper immediately above him was not taut. I do not necessarily accept this statement—which, if true, condemns Taugwalder the guide more than it does the amateur—since it is only introduced to explain the fact, now first brought out, that Taugwalder was thereby enabled to give the rope a turn round a projecting rock. I do not remember any rocks on that part of the mountain which would have furnished an instantaneous and safe stance. But it would appear that the thin rope did offer a certain amount of resistance, since Taugwalder complains of his ribs being painful.

The judgment of the Court of Enquiry is colourless, as might be expected from a tribunal who had no claim to be experts.

Among the Alpine papers of the late A. Adams Reilly, now in my hands by the courtesy of Mr. Mortimer, are a number

[2] Not over the actual place of the accident which lies away to the left.

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of letters bearing on the projected ascents of the Cervin prior to 1865, and incidentally on the relations between Whymper and Croz. One of these days I will attempt a summary of them.

October 8, 1920. J. P. FARRAR.

LE CONGRÈS DE L'ALPINISME À MONACO.

(1er Mai–20 Mai 1920.)

THIS highly successful congress was attended by about 200 representatives of the mountaineering clubs of the world. Its success must be ascribed in a large measure to the great personal interest taken in it by H.S.H. the reigning Prince of Monaco and to the driving power of Baron Gabet, President of the C.A.F., who, aided by many devoted workers, organized the arrangements in a most complete manner. It must be confessed that the many outside attractions, such as luncheons, banquets, receptions, small mountain excursions and motor drives in the unrivalled environs of Monaco, organized by the Committee, tended to minimise the attendance at the reading of the many elaborate papers.

Among the English papers contributed were:

'A Consideration of the Chances of ascending Mt. Everest,' by Prof. Kellas (a very suggestive and valuable paper); 'Attempts on K_2,' by Dr. Jacot-Guillarmod; 'The Brunegghorn in History,' by Mr. Coolidge; 'Explorations in the Japanese Alps,' by Mr. Weston; 'History of the A.C.,' by Mr. Mumm.

The whole meeting was marked by a cordiality of feeling that leaves in the minds of the participants the warmest memories.

The English members were particularly struck by the veritable heights of eloquence attained by their French and other colleagues, while the far too flattering allusions to the British Empire and its representatives quite put them out of countenance.

Among the representatives of the C.A.F., besides the President, M. le Baron Gabet, were M. Berge (Hon. President), le Commandant Cuënot (Vice-President), M. Bregeault (Sec.-général), M. Paillon, Editor of *La Montagne*, M. Gatine (Vice-President), M. Ferrand, the well-known Alpine author and President of the Société des Touristes du Dauphiné

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(our hon. member), M. le Chevalier de Cessole (our hon. member), the indefatigable President of the Nice section, M. Filhoulaud, member of the Committee of the Nice section (who was mainly responsible for the organization of the Congress), and the super-eloquent, silver-voiced Professor Girardin.

The S.A.C. was represented by its Past-President M. Bernoud, a witty speaker, Dr. Jacot-Guillarmod, the Karakoram explorer, Professor Mercanton, the great authority on glaciology, whose gaiety and keen personality were a great factor, and M. Paul Montandon, our own hon. member. The Italian delegate was M. Bobba, the famous mountaineer and author.

The States sent Professor Charles E. Fay of Tufts College, President of the American A.C., whose speeches were much applauded, especially when he was called upon to answer for Canada (!)

Canada sent, above all, Mrs. Henshaw, besides Dr. Ami and Mr. Byron Harmon, noted for his mountain photographs and whose lectures were the best attended of any.

Mr. Weston represented Japan. Scotland sent Ling, our Ling, President S.M.C. The general secretaries were Mr. H. F. Montagnier and Capt. J. E. C. Eaton, who were quite indefatigable.

The A.C. was represented by myself (Acting President *ad hoc*) and the Hon. Secretary, Capt. Eaton. Upon my great good comrade fell the lion's share of the speaking, admirably done, as the threatened strike delayed me four days.

We wound up by giving a dinner to our colleagues, at which about twenty-four sat down—and finished up, very late—at the Café de Paris—going very strong, all out. The compliments paid to the A.C. and to us as its representatives were such as quite to exhaust my power of blushing, while Eaton seemed to accept them quite as a matter of course.

It was throughout a time of splendid, mutual good-feeling that cannot fail to produce valuable lasting effects.

At a breakfast given by H.S.H. the Reigning Prince, at the close of his speech, he turned to the English-speaking delegates, and in perfect English spoke as follows:

'Gentlemen,—I will also address a few words of welcome to you English and American friends who have proved all over the world your high qualities as mountain explorers. I never went on any mountain, however infernal it may be, without finding there some of your footprints.

'To understand my feelings when I call you friends you must remember how many thousands of your brothers have,

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very few months ago, shed their blood on the soil of our countries, when helping to save our civilization; and you must know how highly we praise your friendship, as well in the peace and in the war.

'Putting aside some political misunderstandings that remain under the responsibility of a few individuals, our nations at large are made to understand each other in questions that can lead all of us to more far-seeing and progress. Every man must feel to-day how foolish it is to ruin the future of our children for a bit of land or for some bubbles on the water.

'And now as we know what power our allied nations can have against those who want to rule the world with guns, it seems possible to bring every matter of discussion on such battle-field as this one, where every one of us seeks for reason and truth.'

In any case the Alpine Club has reason to be proud of the warm-hearted estimation in which it is held.

J. P. FARRAR.

NARRATIVES OF ASCENTS OF MONT BLANC AND MONTE ROSA IN 1855 BY MR. EDWARD HYDE GREG.

With a Note by GODFREY A. SOLLY.

SO far as I know the attention of climbers was first called to the expeditions of Mr. E. H. Greg by the paper of Mr. H. F. Montagnier in Vol. xxxi. of the ALPINE JOURNAL, page 305.

As I had known many of the family I made some inquiries, but it was only after the Armistice that by the courtesy of his son, Lieut.-Colonel R. A. Greg, C.B.E., I was able to see the records that he had left. He appears to have kept journals of his tour, and in 1896 he copied in his own handwriting the two accounts which follow, but the original journals cannot be found, and were probably then destroyed.

These copies are bound up with a large paper copy of Auldjo's Ascent of Mt. Blanc, and with manuscript extracts from some other printed accounts of ascents, and with them are his passport dated 1855, and signed by him in 1855–1875 and 1907, and the original certificate of his ascent of Mt. Blanc, dated August 29, 1855, and signed by the Syndic and all the guides as well as by Mr. Greg himself.

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Mr. Greg was born on November 9, 1827, so was 27 years of age in the summer of 1855. He came of a family that has been honourably known for several generations on the borders of Lancashire and Cheshire, both in commercial and social life. He lived at Quarry Bank, Handforth, Cheshire, and died at an advanced age in 1910. He was a Magistrate and Deputy Lieutenant for Cheshire, was for many years a member of the County Council, and for 25 years served in the auxiliary forces of the Crown. In this respect he was followed by two of his sons, Col. E. W. Greg, C.B., and Lieut.-Col. R. A. Greg, who both did good service in the War. He made later visits to the Alps but without ever doing any more serious climbing, and he had travelled in America, the West Indies, and Mexico, and was a keen sportsman and rider to hounds.

For the Mt. Blanc expedition Mr. Greg started with his brother and a Mr. Parker, but only Mr. Greg, with four guides and a fifth guide as a volunteer, went to the summit. The guides were Michel Ambroise Payot, François Devouassoud, Julien Ravanel, and Joachim Ducroz, and the volunteer was François Romain Payot, who was also a qualified guide. He seems to have been a good man, but nothing more is known of him as a guide.

Opposite the names of the first two, Mr. Greg has written 'Pretty good ones.' The note for the third and fourth is not so flattering.

Michel Ambroise Payot, who must not be confused with the celebrated Michel Payot of a rather later date, was a well-known guide. He was the 'Michel Payot, a publican' who was with Messrs. Grove, Macdonald, and Buxton on the first ascent of the Aiguille de Bionnassay in 1865 ('A.J.' ii. 322), and is perhaps the M. C. Payot who was with Messrs. Adams-Reilly and Birkbeck in 1864 ('A.J.' xxxii. 20). In 'A.J.' i. 374 the famous Michel Payot is described as 'not the well-known guide of that name.' Michel Ambroise Payot was, I am informed, still living in 1905.

François Devouassoud is, of course, the celebrated guide of that name, and was then about 23 years of age. His signature on the certificate corresponds with that at the bottom of the photograph in 'A.J.' xxxi., facing page 198. The signature of the Syndic is not very clear, but is probably 'Desailloud Joh.'

From Chamonix Mr. Greg went to Zermatt; there is nothing to show the route taken, but one imagines that if he had gone

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over any of the passes he would have left a record. His boots were worn out, and on Monte Rosa he wore a pair bought at Vevey, so probably he went by way of Geneva and Vevey, and up the Rhone Valley to Visp, and on September 17 he made his ascent of Monte Rosa from the Riffel as recorded in his journal. In Mr. Montagnier's paper and in Dr. Dübi's 'List of Travellers and Guides on Monte Rosa' which follows it ('A.J.' xxxi. 336) there is a suggestion that Mr. Greg made two expeditions on the mountain, but the discovery of his journal proves that there was only one. The doubt was raised owing to the entries in the hotel books at the Riffel and at Zermatt being not quite consistent. In one entry he says he 'reached the first summit at 12, did not go on to the highest (100 feet higher) as it was late.' In the other entry he says, 'I reached the summit at 1 o'clock'; but as the last part of the entry has been cut off, we cannot now tell whether he wrote any qualification of this. The journal makes it clear that he did not reach the Dufour Spitze. What point he reached is rather a puzzle, and as his guides were Mathias and Johann Zum Taugwald, who knew every point on the mountain, it seems astonishing that they did not persuade him to go to the actual top. I have examined their Führer books, which are now in the Club Library, but they contain no reference of any kind to the expedition. I think it is clear that Mr. Greg's party ascended by the W. arête, and this is borne out by the note of the ascent by the brothers Smyth, in which they say that their route has since been always adopted by the guides ('A.J.' xxxi. 315).

One may perhaps conclude with an expression of admiration at the pluck and grit of a man who, after a long day on Monte Rosa in uncomfortable boots, left Zermatt at 7 A.M. next morning, and walked to Visp by 5 P.M. Some of us are old enough to remember Zermatt before the railway came, and may have left on the morning after a big climb, but in our day there was a road as far as St. Niklaus, to which point we could, and generally did, take a carriage.

'Ascent of Mont Blanc from Chamouny.

August 27 *and August* 28, 1855.

'Having ascended some of the mountains in the valley of Chamouny including the excursion to the "Jardin" which gives one good Glacier practice, and the weather being fine, and likely to continue so, I determined to try for the "Ascension de Mont

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Blanc." Accompanied by my brother Arthur and Mr. Parker, therefore, we left Chamouni on Monday morning August 27, 1855, with six Guides, one Volunteer, and four Porters for the Grands Mulets "cabane." We carried with us a large stock of provisions and nine bottles as well as wood for our cooking fire in the G. Mulets "cabane." We reached the Glacier de Bossons at 2.30 P.M. The passage of this Glacier was not so easy as it sometimes is, and we had some difficult and somewhat dangerous crevasses to get through or over. We crossed it in about an hour. The ascent on the snow from hence to the G. Mulets rocks was steep and laborious, and we had sometimes to cut series of steps for our feet with the ice axes. We arrived at the "cabane" at about four o'clock, and here the Porters left us. It is a miserable place and very dirty. We cooked a meal which we called dinner, and utilised some of our Wine. The Sunset was very splendid and later on the stars, and the planet Jupiter, shone out brilliantly. The moon which was about the "full" had not yet risen. We "lay down" at about ten o'clock for rest, and sleep, if we could manage it, but we certainly did not sleep much. There were occasional loud noises of avalanches falling, and "reverberating." Soon after midnight we were up, and made some chocolate. At half past one, we got under weigh, and clambered down the Mulets rocks on to the snow, all roped together at suitable intervals. We carried two lanterns to assist us during the dark period before sunrise or rather until the moon rose for *us* which occurred about an hour before daylight commenced. We reached the Grand Plateau about four o'clock and here I left my large aneroid barometer (on the snow) as it was only arranged to show about 11,000 feet, and would be "strained" if carried much above that height. We crossed several very awkward snow-covered crevasses one of which was so weak that we had to lay our alpenstocks over the snow bridge side by side and walk sideways over them. On another my leg went through but the rope prevented me following it bodily. We found it very steep rough work from the Grand Plateau to the Corridor, which is the new route, the "ancien-passage" being given up from the danger of falling avalanches, which the Corridor route avoids. The Corridor commands a view of the other or Italian side and the Col du Géant, the route followed from Courmayeur to Chamouni. We reached the "Mur de la Côte" about eight o'clock and found it very like Albert Smith's panoramic picture, only frozen snow instead of ice. It was very steep and we found it necessary to cut our steps with the axe, which was very slow and cold work. My feet were very cold and "numb," and I contemplated the chances of their being frost-bitten with feelings of anxiety. The "Mur de la Côte" took us about an hour to surmount. After this we crossed a plateau, after which was another dôme, steep and toilsome, then another plateau, and after this the last dôme which was rather similar to the other. I was very much exhausted

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and feeble from the difficulty of respiration. My head ached severely and my nose bled. I was also sick and my ears were very painful. I never felt so low and dispirited and hopeless and could only move a short distance at a time, without several minutes rest. The Guides could give me very little help, as they seemed as bad as *I* was. The Volunteer was the only one who really assisted me. I put lumps of snow in my hat to cool my head a little. I felt occasionally as if I would and must give it up, and return. At about my worst, I thought I caught sight of the summit, which gave me fresh energy, and I made a determined effort and passing my Guides, made a sort of rush for the summit, which I reached at about Ten o'clock. It was some little time before I could look about, and around. The South or Italian side was very cloudy and we had little or no views, but the North and Swiss and French side was very clear and the outlook was grand. The summit is a rather sharp ridge some 60 or 70 yards long terminating abruptly, with apparently sheer precipices down to the Italian side. I scraped the ice from my boots and tried to warm my feet in the sun, which was very hot. We also made a "dejeuner" on our fowls, bread and cheese &c. and champagne with which we drank the health of "The Monarch of the Alps." We basked in the glorious sunshine and rested for about an hour, when we "gathered ourselves together" for our descent, my headache being still very bad. We found the descent very different from the ascent. We frequently glissaded down the slopes hundreds of feet at a stretch in a few minutes. We found several of our snow bridges gone since our early passage over them and had to seek for others. At one place over a very wide and deep crevasse the snow bridge only 3 feet wide was so weak that we considered the only way to cross it would be on our backs flat instead of on our feet. We climbed some little way up the slope and sat down one below the other, and at a given signal set off at a slide over the snow bridge at considerable speed. I did not feel very comfortable at the moment I was shooting *over* the bridge. There was, however, no mishap. At about half past two o'clock we reached the Grands Mulets where we stopped to rest and lunch and at half past three we started for Chamouni. We found the passage of the Bossons Glacier perhaps more difficult than in the evening of the previous day. We reached the village (Chamouni) at about eight o'clock in the evening amidst the firing of cannon, and the welcome and acclamations of the inhabitants, for at this period (1855) the ascent of Mont Blanc was still considered a great and fatiguing and somewhat dangerous affair. Up to the Autumn of 1855 there had been only about 76 ascents. It was Albert Smith's somewhat sensational ascent two or three years previously that to a great extent "popularised" the mountain and brought it into "fashion." It will, however, "from the nature of things," always be a "big" enterprise, by no means unaccompanied with danger, and certainly with difficulties.

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It is a matter very much of *weather* which is always a very uncertain element in districts like Chamouni. I consider I was very exceptionally favoured in this respect as *my* weather was *everything* that could possibly be desired, including the splendid sunset, the beautiful full moon and the glorious sunrise. It was a "great" excursion and has left indelible and life long feelings of romance (re-written in 1896) in my nature, for which I am properly grateful.

'*Memorandum* taken during my ascent, and written down at the time. Temperature at midnight at Grands Mulets bivouac 31. At 12,000 feet one hour before sunrise 10 (above Zero). At 14,000 feet two hours after sunrise 13 (in shade), on the summit 15,800 feet, 5 feet from ground, 33 in the sun. On the North side out of the sun 19. Pulse beat 125 to 130 on summit. During exertion on the Ascent 70 to 80 in the half minute!! I felt very uneasy and sometimes alarmed at the continuous rapid pulsations and at times terrible headache. At 2 or 3 A.M. I drank some strong concentrated essence of tea which made me feel very ill in a short time, and dreadfully sick. It seemed almost like an irritant poison. It should have been "let down" with *water*. I wore my usual medium travelling suit and wide-brimmed light wideawake hat with strong green veil and snow "green goggles." Notwithstanding my precautions, I was much blistered and the whole of the outer skin of my face peeled off in the course of 2 or 3 days. I was always "roped" to a guide in front and another in rear of me, and I never felt giddy or *afraid* though sometimes "nervous." I felt great faith in my guides, though as I afterwards found out they were not A.1 guides. My expedition cost me about £23 and I have never "grudged" the outlay. It was *well* spent.

'The true height of Mont Blanc is 15,785 feet or nearly 16,000 feet. } Signed EDWARD HYDE GREG.'

'MONTE ROSA. YEAR 1855.

'On Sunday afternoon, September 16, I left Zermatt for the Riffel Inn, intending to ascend Monte Rosa on Monday, the weather being fine and promising, with a clear sky and brilliant stars. I was up at 3 and off at 4 with my 2 Guides Matthias and Johann Zum Taugvald. This was the first year that the mountain had been ascended, though it had been several times attempted, but without success until this particular route had been properly found, viz. by working along the Western ridge or arrete, instead of by the Nord-End, which for several reasons is almost impracticable. We were on the Glacier (Gorner) at 5¼, crossed it by 6¼. The sunrise was very splendid, illuminating all the great peaks in succession, the Matterhorn first. Till about 8 the snow was good and hard. It then became soft and troublesome, often nearly knee deep, feet very cold and feeling like frozen. The sun became hot

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and powerful. There were frequent tracks of chamois, which indicated on several occasions where to cross over crevasses, as they always by instinct choose safe places. For the next two hours we were ascending long steep ridges of snow often "razor bladed" with one foot on either side, with sometimes awfully precipitous slopes several thousand feet in depth, on one side rocks and on the other snow or ice. We then arrived at the dreaded level or slightly ascending ridge of rocks and snow or ice combined. This took ½ to ¾ of an hour to cross, and was the most difficult and often frightful piece of work. To make it worse the Guides insisted on un-roping, as if any *one* were to slip, nothing could save the others. I found the "moral" effect of this "un-roping" to be *bad*, and I often felt more nervous and even frightened than was good or safe for me. Sometimes we had to cross over 3 or 4 yards of "razor bladed" snow ridge without a morsel of *rock* for "foot-hold." At one place I told the Guides I could not or dared not, go *any* further, but they talked of "courage," &c., and urged me on. On my last visit to Zermatt I mentioned this "un-roping" affair to a great Mountaineer, who said it was abominable and has long been done away with. After we had crossed this dreadful arrete we came to a terrible slope of snow on the rock, a mere ridge at an angle of what seemed 60 or more. I felt thoroughly frightened and was again almost ready to "give it up." We had to stop every few minutes, for breath. My pulse beat 60 to 70 in the ½ minute, the exertion being very great and the heat was "burning," and I dared not lower my sun veil, as I required *all* my eyesight. On two occasions the Guide below me slipped, jerking the cord round my waist rather severely. This also upset my nerves, for I had quite enough to look after *myself*. At last the *first* peak of the summit ridge which consists of *three*, the centre one being some 80 feet higher, was reached, but it would have taken up more time than we had to spare to reach the middle one as we had *started* an hour late, and the soft snow had delayed us a good deal, and it was now nearly 1 o'clock. Moreover we should have gained absolutely nothing in the view. On the Italian side, as from the summit view from Mont Blanc, nothing could be seen but a great world of clouds *over* the *top* of which we looked down upon. On the Swiss side the views were absolutely fine and grand. We therefore decided to *rest* for ½ an hour and then descend. My head ached dreadfully as it did on the highest parts of Mont Blanc. I did not care to eat any "luncheon" as I did not see how I could ever get safely down again. In about a quarter of an hour we began the descent, which of course would *seem* worse than the *ascent*, as we should have to *face* our difficulties, instead of having our backs to them, to a considerable extent. The *labour* however of *de*scending is of course very much less, and the saving in *this* respect more than the *apparent* increase of difficulty and danger. We continued our slow and careful descent for two or three hours till we got *off* the formidable ridges of alternate snow, ice, and rocks, and out of what *I* con-

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sidered *danger*. I now felt *well* inclined to *finish* my scanty luncheon and we finished off the two spare bottles of wine amongst us with complete relish. After this, and a short rest we started on the long and tedious *soft* snow portion of the mountain, *now*, much softer than we found it in the *early* morning in consequence of the great heat of the sun. In this way we plodded on till the lower portion of the mountain was reached with firmer and safer snow, and but little rock-work till we again reached the great Gorner Glacier, which we rapidly crossed and finally arrived at the Riffel Inn at a quarter to six. I here paid my bill and the guides and descended quickly to Zermatt alone, having lost my track when more than half way down from the darkness, and found myself again at the Hotel before eight o'clock (Hotel du Mont Rose, Herr Seiler) well pleased with my expedition. The expenses were of course very much less in every way than for Mont Blanc expedition, viz. Guides (two) 80 francs, 10 francs "tip" and about 20 francs provisions or well under £5 against £25 Mont Blanc. The height of Monte Rosa is 15,500 feet high, that is the highest of the 3 peaks which form the summit ridge, my peak being 80 to 100 feet lower. I may here state that I was seriously hampered and troubled in my Monte Rosa expedition by my boots, which were bought ready made at Vevey and were *every* thing that boots should *not* be, ill fitting, ill made "lubbering" "Wellingtons," with dozens of *smooth round*-headed nails, everything that climbing and ice and snow boots should *not* be, and requiring 3 pairs of socks to "fill up." My Guides were even more shocked than *I* was. They were absolutely *dangerous* for a difficult mountain, and very *seriously* increased my troubles and dangers on those terrible ridges and "razor blades," and were the cause of at least one half my anxieties and difficulties during the *ascent* and *descent*. I will venture to say that not one Alpine Climber before, or since, has been so ill-booted, or been so jeopardised by such a cause. I have never forgotten this to me then *dreadful trouble* and I may say *affliction*: my good properly made well fitting English shooting boots which served me so faithfully on my Mont Blanc ascent were "*done for*" by hard work, and had been abandoned. It is impossible for *any* one to understand or realise *what* a trial and sorrow these "awful" Vevey boots and nails were to me. I have never put a boot on since that time without momentarily *thinking* of those boots!!!

'The next morning (after my ascent) I started at 7 o'clock carrying my knapsack on my back from Zermatt, for Visp (in the Valais) distance about 25 miles, stopping 1½ hours at Stalden for rest and food. I arrived at 5 *p.m.* and found the Diligence for Vevey gone, so had to wait for the next at 12.30 (midnight). Mr. Ralph D'Israeli, brother of B. D'Israeli (Dizzy), accompanied me all the way. I breakfasted at Sion, and left at 6, arriving at Vevey by steamer from Villeneuve at 3 P.M., and so ended my Monte Rosa-cum-Zermatt expedition.'

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IN MEMORIAM.

HERMANN WOOLLEY.

1846–1920.

HERMANN WOOLLEY was born in 1846, the fourth son of James Woolley, founder of the firm which has developed into the large wholesale and manufacturing pharmaceutical chemist business of James Woolley Sons & Co., Lim.

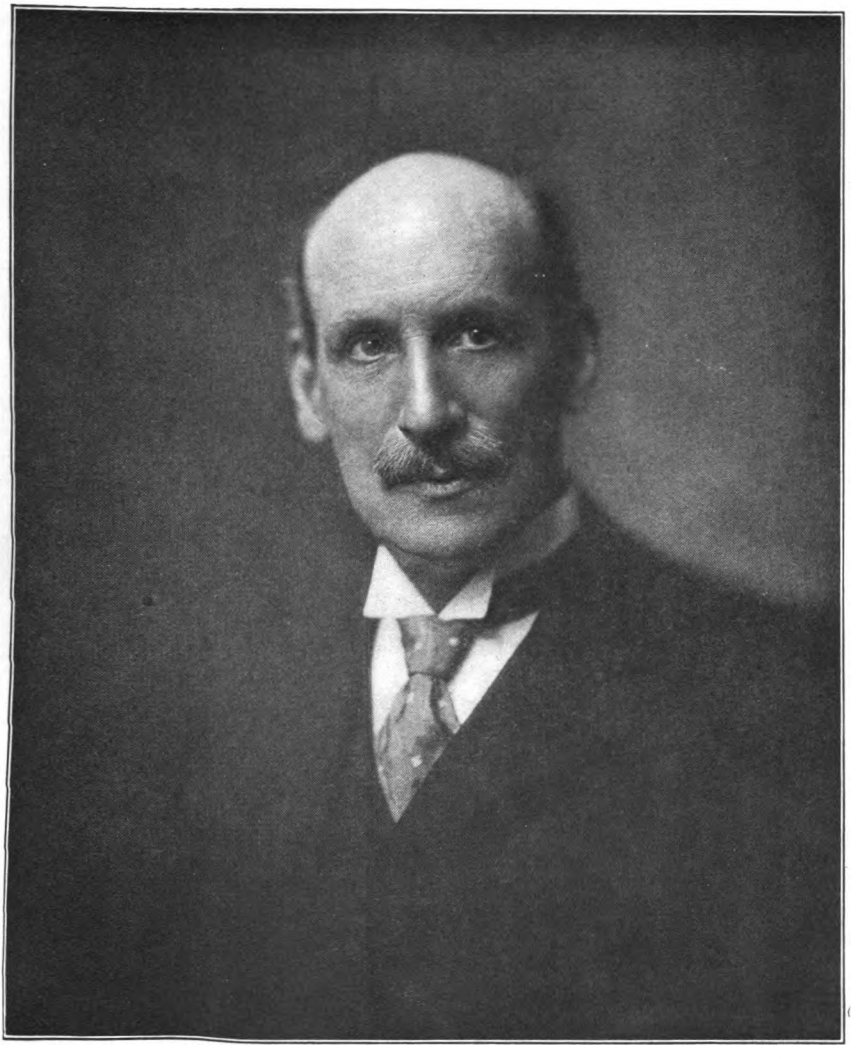
He attended Mr. Etienne's school in Higher Broughton, later was at a school at Darmstadt. He then went to the Pharmaceutical College in Bloomsbury Square to acquire the special training required for his prospective business. In the annual college examinations in 1867 he took the medals in Botany, Chemistry, Materia Medica, and Pharmacy, as well as the special Pereira medal. He continued his chemical studies under Roscoe at Owens College, where he sat at lectures next to my eldest brother, the late John Hopkinson. In 1868 he joined his elder brother in the business, specialising on the manufacturing part. He remained in active association with the firm until his death. An intention of retiring many years ago was frustrated by the untimely death of his younger brother.

Woolley exhibited strong athletic tastes; played football with the Manchester Club, rowed on the polluted Irwell, and boxed conventionally at the Boxing Club and Athletic festivals, and unconventionally whenever a convenient occasion offered. His prowess was well known in different circles. On one occasion appealed to by a bus conductor, he ordered a noisy ruffian to get off the bus, at first without result, except to increase the flow of blasphemy and abuse. On repeating the order the story goes, that it was supplemented by a spectator, 'Tha'd better; it's Woolley,' when immediate obedience resulted. The medals and cups he won show the variety of his activities, including as they do High Jump (3), Boxing (8), Gymnastics (4), Clubs, Dumb-bells, and Rowing (4).

A boating expedition on the Danube, undertaken alone, indicates the developing love of travel combined with athletic exercise, which later was concentrated on the peaks, passes, and glaciers of many regions: the Alps, Caucasus, Norway, Canada, and the hills of his native isle.

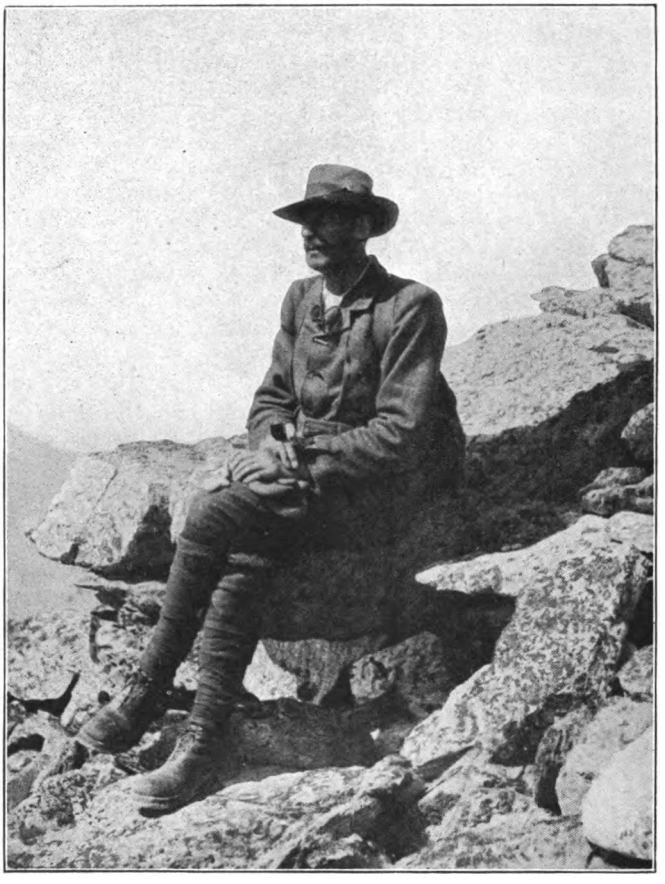
Taking up photography as an accessory to his travels and climbs, he applied his characteristic care and thoroughness to the art, developing much technical skill, and was for many years a regular exhibitor at the photographic shows of the Club. My first expedition with Woolley was at Easter 1879 to Wastdale, my youngest brother completing the party. I was warned by a friend who knew his reputation, 'He'll walk you to death.' However, even at

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HERMANN WOOLLEY.
(As President.)

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[*Photo. A. F. R. Wollaston.*

HERMANN WOOLLEY
in 1903.

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that somewhat remote epoch his preference and relative superiority in uphill over downhill going were noticeable, and what I lost on the rise I gained on the fall. We had a time pleasant enough in spite of cold winds, but of greater consequence to me as the foundation of an enduring friendship, which was last exercised in an evening spent on his draft Memoir of Charles Pilkington. I was one of Woolley's many admirers. His fine distinguished physiognomy ever gave me pleasure. His imperturbable good temper, his modesty, and his unfailing devotion to duty gave a basis for friendship of strong character, lightened in companionship by genial touches of frivolity and humour. Although he climbed at one time or another with some strongly opinionated comrades, none ever quarrelled with him or wore out his good temper by their futility or egoism. To his character as much as to his technical skill and camp experience one may safely attribute the desire for his presence in expeditions which involved travel as well as mountaineering, and in which companionship had to bear the stresses of camp life.

In 1888 I had the pleasure of seconding his nomination as a member of the Club. He presented a fine qualification, beginning with the Titlis in 1877 and ending with Koshtantau and the 'Saddle peak' in 1888.

A somewhat high pressure of achievement is indicated—take 1881, for example—July 28, Trift Joch; 29, Zermatt Breithorn; 30, Rimpfischhorn; August 1, Zinal Rothhorn; 4, Matterhorn; 6, Weisshorn—or in 1885, August 12 to 21, Bietschhorn, Petersgrat, Schreckhorn, Eiger, Jungfrau, and Finsteraarhorn. 1886 is distinguished by a Norwegian peak (Romsdalshorn), as well as by Mt. Blanc, the Dru, and Marmolata; 1887, by a February ascent of the Mönch. Woolley soon made his mark in the Club. A frequent attender of the Club meetings, his wide and ever-growing acquaintance with mountains enabled him to join in many discussions. He was one of the authorities on Caucasian climbing, and wrote a chapter for Freshfield's standard work. Many papers described expeditions in which he had shared. His circle of friends in the Club widened rapidly, and his standing as an exponent of Alpine craft was constantly rising. Elected to the Committee in 1893, he became a Vice-President in 1902, and served as President (1908–1911). At the time of his death he was an extra member of Committee. His interest in the Club was not confined to London; for a number of years it was his hospitable annual practice to invite the A.C.'s resident in and near Manchester to dine with him.

As his reputation as a climbing traveller grew, he had a good deal of correspondence with men desiring to utilise his experience or to follow in his tracks; whether to stranger or acquaintance he gave the best and fullest information in his power, conscious of the tax on his time, but none the less giving ample measure.

Up to the time of his joining the Club most of Woolley's

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mountaineering was done alone with guides, except, of course, the fruitful Caucasian expedition with Holder and Cockin. Later, in his expeditions to the Caucasus, Lofoten Isles, Canada, and the Alps, he did much guideless climbing, and the JOURNAL has so many references to these expeditions that I refrain from giving a list. Woolley's latest Alpine holidays are referred to by him in his Memoir of C. Pilkington ('A.J.' No. 219, p. 350). His winter visits to the Alps were made as much for photography as for climbing, with resultant pleasure to his friends, who received as Xmas cards some charming examples of his skill. For one of Woolley's retiring disposition neither party politics nor municipal affairs offered a congenial field of work; but as Treasurer and Deputy-Treasurer of the University of Manchester he gave useful and important public service. His last illness was brief. He attended as usual at Cross Street Chapel on Sunday morning, caught cold, pneumonia supervened, and he died on the Friday.

CHARLES HOPKINSON.

Mr. WILLIAM CECIL SLINGSBY writes to Captain Farrar:

Taormina, 14, 3, 1920.

'A letter from Sir Alfred Hopkinson tells me that my dear old friend Hermann Woolley has died—another great mountaineer gone to his long rest. Lancashire has given three great presidents to the Alpine Club—all now gone, Horace Walker, Charley Pilkington and Hermann Woolley. All men with whom I have often climbed.

'Woolley I have been with in the Alps, Norway, Skye and many another corner in Scotland. He was an ideal companion at all times, full of resource, of quaint humour, most unselfish, wise and discerning about the weather, always in good humour whatever was the weather. Even on Stedtind when he, Baly and I wedged ourselves close together in a crevice of rock with a strong freezing North wind, whilst Collie, my lad Will, and Morris, together discovered the key of the stronghold which the wind alone prevented us from unlocking, Woolley was quite unperturbed. In camp he was splendid, resourceful and always at work doing something for the general good. No one knew better than he the vagaries of wind upon tents. On a mountain he was always quite at home, however fearsome the snow slope which had to be crossed, however savage the rocks. Yes! he and Collie together in Lofoten were grand companions.

'Then, Woolley's photography and his great generosity in giving friends the fruits of his labour were marvellous.

'Some years ago I had a letter from him in which was something to this effect:

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'"Dear Slingsby, I have just moved to a smaller house, and have hardly room for my lantern slides. As I know you give lectures and show slides sometimes, I am sending you a few just to be out of my way." It was a splendid selection. He did something in the same way for C. Pilkington.

'Woolley was indeed an all-round sportsman of the highest type. He proved—as all we who had the privilege of knowing him intimately knew would be the case—to be a first-rate Alpine Club President, and I always feel proud when I remember that it fell to my lot to propose him to the Alpine Club Committee, Freshfield seconding the proposal.

'As a young man he was a first-rate light-weight boxer and football player. For many years too he took a week's rowing on the Thames. This we found out when in Lofoten.

'Yes! we have lost a great, a very great and most lovable member of the Alpine Club, the very remembrance of whom we shall always cherish very dearly.'

It was in keeping with the whole life and nature of Mr. HERMANN WOOLLEY that, though he died last Friday and was cremated yesterday, no memorial notice of him should have appeared anywhere in the press. He was a man of an unsurpassably modest and quiet dutifulness. In Manchester he did good work for the University, and his tall figure was well known at the Reform Club, but he was not a prominent 'public man.' As a mountaineer he was on another level of distinction. Like some others of the essentially greatest mountaineers, he was not connected by name with any particular feat or special line of exploration. But all British mountaineers and many foreign ones recognised in him a model of that which every mountaineer should wish to be. Perhaps no other President of the Alpine Club has ever been so popular. He had all the right qualities for a climber—the physique and hardihood, the resolution, the equable temper, the generous comradeship. Such men sweeten the life of exploration or campaigning. In mind he belonged to the great age of pioneering in the Alps—the age of John Ball, Leslie Stephen, Bonney, Tyndall, Lord Bryce, and Llewellyn Davies, when the leaders of British mountaineering were of such an intellectual standing as no sport has ever boasted in its captains before or since. Woolley's mind, scientific in cast and fully trained, was also saturated with the literature of mountains. He explored to the bottom the interest of everything that mountains offered him. Probably he has left no written work that will indicate to those who did not know him the fine quality of his mind; writing was not his natural vehicle of expression. His distinction was simply that of a rare personality, powerful and extremely gentle, known to comparatively few people besides those who shared his intense love of mountains

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and mountain adventure, but remembered among them as one of the most wholly good personal forces they have ever known.

[By Mr. C. E. Montague in the *Manchester Guardian*, March 3, 1920, by kind permission.]

As one of Hermann Woolley's intimate friends, I feel that I cannot let the opportunity pass of expressing the real sorrow which I felt on hearing the news of his death after a very short illness. This came as a great shock to me as well as to many others of his friends in the Alpine Club.

I met Woolley for the first time at Zermatt in the winter 1893–94, during the early days of my Alpine career, and was at once attracted to him by the genial charm of his manner and his kindly interest in the efforts of a novice like myself, and to my great advantage we were companions in the Alps for many succeeding winters.

The possession of a sound knowledge of a wide range of subjects and a keen sense of humour made his conversation both instructive and delightful.

Woolley had great strength of character, and although by nature of a most amiable disposition he was decidedly a man not to be trifled with. He was extraordinarily broad-minded in his views, and had the somewhat uncommon quality of seeing the best side of people, even though they might not be congenial to him.

Habitually businesslike in all his undertakings, he always took a very serious view (sometimes, perhaps, too serious) of any duties which devolved on him, and in this respect I should like to mention a fact which I think may not be generally known to members of the Alpine Club. While he was President of the Club he attended every single meeting, including those of the committee, during his tenure of office, which at the time constituted, I think, a record which has only been equalled by a subsequent President.

Hermann Woolley's death leaves a gap which cannot be filled, and I feel that to have possessed the friendship of so remarkable a man has made my life the richer.

SYDNEY SPENCER.

I never had the pleasure of climbing with Woolley, but he and I made many excursions together within the last twenty years, on foot, by train, or by motor, in the Alps, in France, and in Scotland. We were, indeed, planning—at the time of his death—a Franco-Italian tour for the past summer, his rheumatic joints having made climbing impossible for him.

He was a wonderfully charming companion. I have never had another so delightful associate on a long holiday, or a short one. He could talk when talking was wanted, or be silent when silence was the more enjoyable. Moreover, he could talk seriously on

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serious matters—scientific, academic (he was acting-Treasurer of the Manchester University for many years), geographic, literary, sporting—whatever subject came up. And he always seemed to know—and really did know—a great deal as to any matters about which he was speaking. His climbing reminiscences—always without the least suggestion that what he had done was at all out of the common—were delightful. I wish they could have been put down for the benefit of the Club. But after a long day, when we were only tired human beings and wanted mental as well as physical rest, he was as ready, as anyone could be, to enjoy the trivial small talk in which most of us delight in such conditions.

He never gossiped scandal of others, and was always ready to recognise the good points even of men whom I knew he did not like. His only drawback as a companion, so far as I was ever able to discover, was his inveterate habit of trying to arrange that his friend should have the best room, or the best seat, or the choice of the day's programme. This unselfish tendency certainly required watching and checking, which I think amused him.

I cannot hope that I shall ever have such another fellow-traveller. The many days we spent together remain always among the most joyous of my experiences, experiences upon which I can now only look back without the hope of ever repeating them.

ALEX. KENNEDY.

CHARLES EDWARD GROVES.

1841–1920.

MANY of the older members of the Club heard with sorrow of the passing away in February last of Charles Edward Groves. He had formed ties of intimate and enduring friendship with a number of them. To those of the younger generation his figure must have been well known, as he was very regular in attendance at our social gatherings. Before the war had thinned its members, a happy party of us were accustomed to dine at the Café Cavour before each formal meeting, and Groves was almost always to be met there. This brought him closely in contact with some of the members who had joined recently.

Charles Groves was born at Highgate in 1841, and died on February 1, 1920, in his seventy-ninth year. He passed the greater part of his life at Kennington, and latterly in a pleasant Georgian vine-clad house on the 'Green.' There, many of us had the pleasure of visiting his sisters and himself in surroundings which were so typical of them. Groves had the gift of a personal magnetism, and his friends were always delighted to be invited to that hospitable home; they were sure of meeting congenial and sympathetic guests.

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An account of Groves' scientific career has been written in the *Journal of the Chemical Society* by Sir W. H. Tilden, F.R.S. Some of the best and most strenuous work of his life was done as editor and sub-editor of the *Journal of the Chemical Society*. He was extremely careful and painstaking; his style was precise and lucid, and it bore the stamp of accuracy in every detail.

He was a lecturer on the staff of the Guy's Hospital Medical School for 15 years, and consulting chemist to the Thames Conservancy for over 20 years. After resigning these appointments he returned to the love of his earlier days—chemical and physical research. In 1883 the honour of the Fellowship of the Royal Society was conferred upon him. He was also an ardent supporter of the Royal Institution and had a large number of friends amongst its members. Scientific research will ultimately benefit considerably by the provisions of his will.

It has been said of Groves that he was magnetic, and this special quality attracted students. They realized that he loved young men; they reciprocated his affection. His lectures, like his writings, were models of lucidity, they were the outcome of a thorough knowledge of chemical and physical science; and his lecture experiments always succeeded, for he was most careful in rehearsing them. It was as lecturer and teacher that the writer first knew him. Subsequently other and closer ties were formed.

Such is a very brief outline of his career. Fortunately we are able to speak of Groves more intimately. He was a fine linguist, being conversant with French, German, and Italian, and even to some extent with Russian. He was, too, an advanced mathematician, well read in history and in other directions. Yet, withal, he was so modest that it needed close association with him to become aware of his wide attainments. Further, he was no mean musician. He performed creditably on stringed instruments, and had a pleasing singing voice. Happily for Groves, his father was a good amateur artist, who took pains to teach his son the points of a picture and how to look for them, so that his opinion of pictures was sound and his judgment reliable.

There was in him a remote strain of Italian blood, for he was descended through his mother from the Tilletti, a noble family in Florence. It was easy therefore to understand how the call of Italy thrilled him, and what special pleasure he found in the Italian valleys of the Alps. Many a happy holiday too was spent by Groves and the writer in the mediaeval cities of Tuscany, where he seemed thoroughly at home. He loved them and their people and gloried in their treasures of art.

Sufficient has been said to show how versatile he was, yet not superficial. His knowledge of many things was profound; and he seldom spoke on subjects, unless he could do so accurately and with authority. His was the particular type of mind to which the Alps appeal with irresistible attraction, and in them he found his chief

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recreation. He visited them each summer from the late seventies of the last century until 1913; and in company with his friends, Howard Barrett, Alfred and Mrs. Topham, C. H. Townley and others he made many ascents. Mr. Townley has kindly furnished the writer with a list of ascents he and Groves made together from 1883 to 1899, some thirty in number. They include the first recorded ascent of the Olmenhorn, the second ascent of the double summit between the Kamm and the Schönbühlhorn (Fiescher Gabelhorn), and the first ascent of the Pointe de Bertol and Crête du Plan. In addition, Groves climbed many of the giants of the Alps and traversed others, in the days when these expeditions were longer and more fatiguing than now, huts having shortened the day's work and ropes rendered *mauvais pas* less trying.

Though Groves could not be classed amongst great climbers, yet he was a most persevering and constant one. In middle life he was very enduring and capable of long hours of work. To him the yearly visit to the Alps was a time of great physical invigoration and intense mental refreshment. He knew that by contact with them he was lifted to a higher plane of spirit; and, like so many others, he realized that when on the Alps the little matters of life, which seem so important in crowded cities, slip back into their appropriate place and cease to trouble one. His very being expanded on the snows and summits, and his deeply reverential spirit found itself in communion with all that is highest and most appealing to the soul.

Another mark of his innate modesty is that it was not until after he had been climbing for nearly a score of years that Groves offered himself for election to the Club. He then submitted a list, which is in many ways admirable.

Until 1912 he frequented his old haunts in summer; also during the preceding ten years he had made winter visits to Switzerland. In that year his friends noticed signs of failing health. His laughter was as ready, as merry and as genial as ever, and his sympathy was as overflowing as of yore. He had had, however, a life of intense toil, he had achieved great distinction, he had done all things to which he had put his hand with his might and well—and at last the machinery began to creak; the tension had held out to its utmost. In 1913 he went to the Alps for the last time; for war intervened and he could go no more.

With us there remain pleasant and lovely memories of Charles Edward Groves, the highly gifted, yet humble and devout Christian soul, the desirable and delightful friend, as one to whom we owe an insight into so much of what is the real meaning of life and whither it tends. He has crossed the Pass, leaving footsteps behind him, in which we shall do well to tread. And may our evening of life be like his, resplendent with the roseate hues of esteem, friendship, and love.

A. H. Tubby.

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CHARLES HOPKINSON.

1854–1920.

By the death of Charles Hopkinson, the Alpine Club has lost one of its most distinguished Northern members, and the city of Manchester has been deprived of the ever-ready help and counsel of a great citizen.

It is but a short time since we mourned the loss of Horace Walker, Charles Pilkington, and Hermann Woolley, three great presidents of the Club, and men of Lancashire. This county now deplores the death of one of their mountain comrades, one who, a few years ago, was a member of the A.C. Committee. After suffering uncomplainingly for several years from asthma, Charles Hopkinson died on September 5, from heart failure.

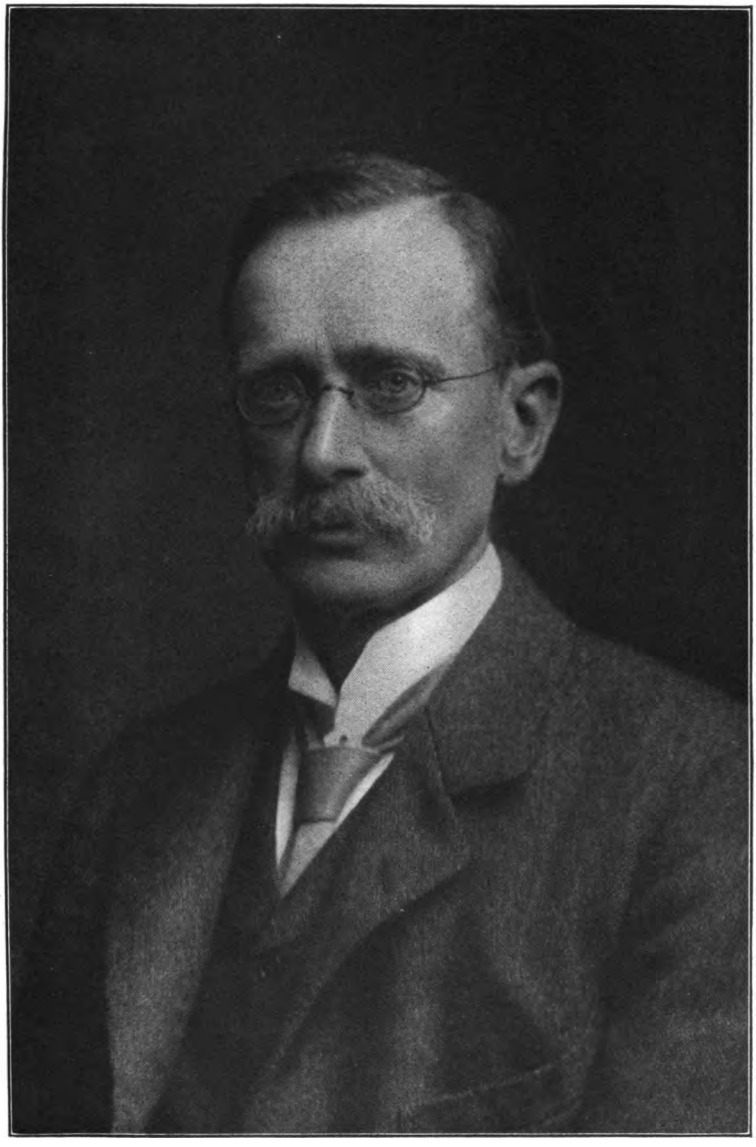
As I pointed out in 'A.J.' xxxii. 356, 'every member of my cousins, the Hopkinsons, has been endowed from early childhood with an intense love of the hills, a love which deepened naturally as years rolled on.' This love was inherited from both of their parents. Their father took them in their early years up some of the fells of Lakeland, the Scottish Highlands and N. Wales, as well as amongst the bonny hills of Craven.

The natural result of this early apprenticeship was that each became an enthusiastic mountaineer, and hence the name of Hopkinson is connected with many a grisly ridge, a rock chimney, or a smooth rock face on the Lakeland fells, on Ben Nevis and elsewhere on the Scottish mainland, as well as in Skye and N. Wales. In due course the brothers went to the Alps, and soon became experts in snow-craft and led the way through many an intricate ice-fall to a mountain summit. It has been my happy lot to climb much with Charley in the British Isles, and occasionally in the Alps. We had also one very successful campaign together in Norway in the year 1888, when we were favoured by the smiles of fortune. The outcome of this was a joint paper, 'The ascent of Mjölnir and the exploration of the Gjegnalund glaciers in Norway' ('A.J.' xiv. 380).

On our first expedition, owing to the gross inaccuracy of the maps, we were benighted near a large glacier. At 11.30 we found a hole amongst tumbled-down rocks which we entered by matchlight and perched ourselves on stones of aggressive angularity, making ourselves as little uncomfortable as we could, and trusting that the beck, which passed through a corner of our cave, and was then rising, would not wash us out.

All through the black hours of night Charley was the very personification of cheerfulness. It was the same too a few weeks later, when the three of us were assailed by a fierce gale which blew blinding mists of finely-grained snow crystals in our faces and down our necks, when we were at the top of the steep snow-filled trap dyke on the great Troldtind in Romsdal,

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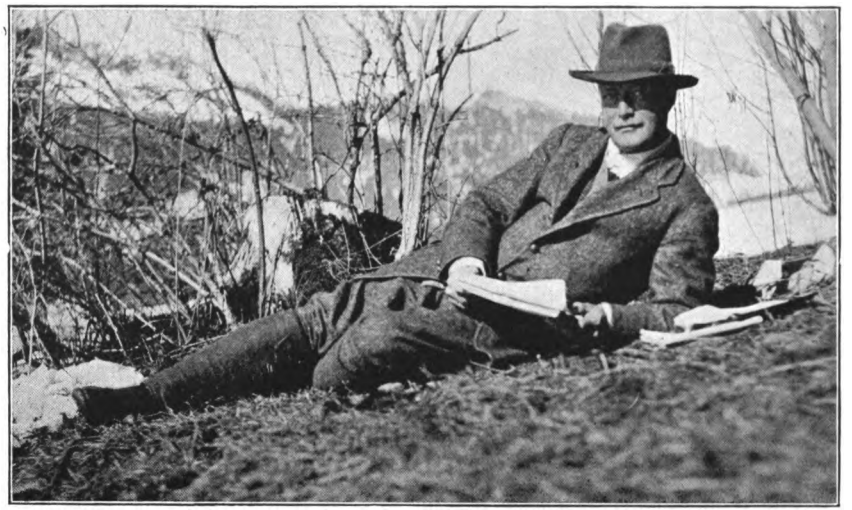


CHARLES HOPKINSON.
(1854 1920.)

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ALFRED GEORGE TOPHAM.
(1862-1920.)

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Never had I, and never shall I have, a more delightful mountain comrade than Charles Hopkinson.

He had an exceptionally lovable nature and a strong character. His thoughtfulness for others, his unselfishness, and perhaps above all his tender-heartedness were great facts. He was too an excellent nurse. This was proved a good many years ago when one of his friends was badly hurt by a fall of rock in Piers Ghyll. On that occasion one of the party spoke of Charley as 'the best man at nursing he ever saw.'

Charley had great versatility. He had a considerable knowledge and appreciation of art and was an intense lover of the beauties and the grandeur of nature.

Although he gave up serious climbing after the accident of 1898, Charles Hopkinson and his wife were regular members of the party of Charles and Mrs. Pilkington in their annual visit to the Alps. Horace and Miss Walker were members of this party in the earlier days, and not infrequently also Hermann Woolley, whose memoir for this Journal was written by Charles Hopkinson shortly before his death.

As a citizen of Manchester his death is deeply mourned. He never spared himself when he was working for the public good, as County Councillor, or when giving so large a proportion of his time, and the benefit of his experience as an engineer, during the period when he acted as Chairman of the Building Committee of the Manchester Royal Infirmary, which owes much in the perfection of its arrangements to his care and foresight. He acted together with Dr. Milnes Marshall as Local Secretary for the British Association meeting in Manchester in 1887.

He was at school at Queenwood, and later attended Owens College. After leaving college he joined his father in the engineering firm of Wren & Hopkinson. Later, he practised as a consulting engineer in partnership with his brother John, and afterwards with his nephew Bertram, until the latter became Professor of Engineering at Cambridge.

Yes! It is well to have had so close a friendship for many years with so great and so lovable a man. It is good also to possess, as I do, such a rich store of happy memories connected with so dear a friend, fadeless memories which will abide as long as life will last.

WM. CECIL SLINGSBY.

ALFRED GEORGE TOPHAM.

1862—1920.

WE have lost another good mountaineer in Alfred Topham, a man who has done much to clear up the topography of little-known Alpine regions.

Born in 1862, he was educated at Harrow and Cambridge. He

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commenced climbing in 1880, and continued the pursuit for over 25 years, his athletic, broad-shouldered, well-built figure enabling him to carry out long and difficult expeditions with enviable ease. His favourite guide was Jean Maître, and he may be said to have been a great authority on the Valpelline and neighbourhood. He was a careful student of topography, possessed a great eye for country, a fine route-memory, while for many years he carried, on his own back, to the top of many of his mountains a ¼ glass-plate camera, weighing about 28 lbs., with which he took photographs and panoramas of great topographical value. When the map of the Valpelline was in course of preparation, the Italian cartographers made copious use of his photographs and observations.

Among his first ascents were:

Pigne d'Arolla by N. face.
Central Dent des Bouquetins by W. face and S. arête.
N. Dent Perroc by N. arête.
Dent Perroc by Pointe des Genevois.
Les 3 Frères.
Mont Faudery.
S. Dent des Bouquetins.
M. Clapier.
Grand Golliaz by N. face.
M. Faudery by E. and W. faces.

His papers in the 'A.J.' were:

'The Valpelline-Valtournanche Range' (vol. xvii.), which did much to clear up a badly mapped country.

'The Ridge connecting Mont Vélan and the Grand Combin' (vol. xviii.).

'The Dents des Bouquetins' (co-author H. V. Reade) (vol. xx.).

He was elected to the A.C. in 1886 (committee 1910), and was a member of the Swiss and Italian Clubs.

In later years he took to yachting, and was very successful on the Solent, while his winters were usually spent at Villars. He was elected judge of skating for admission to the National Skating Association—testimony enough to his powers.

The war sat heavily on him. His only son was at the front—fortunately coming through—while he threw himself into the arduous Special Police work (Inspector, Kensington Division), with long hours on duty in all weathers and in every raid.

We who knew him well will not forget his honesty of purpose, clean-mindedness, and horror of everything underhand.

He was a worthy son of the Club whom we can ill afford to lose.

J. P. Farrar.

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DR. ALEXANDER SEILER.
(1864-1920.)

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ALEXANDER SEILER.

1864–1920.

A GREAT personality, the friend of every English mountaineer, passes away in Alexander Seiler, who died suddenly of apoplexy on March 3.

The second son of the founder of the Seiler hotels, Alexander was born at Brigue in 1864 and educated at Sion, Heidelberg, Louvain, and Munich, and took the degree of Doctor of Laws. He was elected Deputy to his cantonal Conseil in 1889, and to the Conseil National in 1906, in which he carried considerable weight.

His many business cares gave him scant opportunity to practise the pursuit which his family have done so much to foster, but in his early days he made one notable route up the Dom and had ascended some of the other Zermatt peaks.

For the last twenty years Seiler had been a power in the land, particularly in the Haut Valais, where he was regarded as a sort of political chief. A loyal friend, an equally hard hitter, it goes without saying that he had warm friends and bitter opponents. His funeral was attended by 3000 peasants of his own Canton and 2000 others.

We Englishmen lose a good friend, one who did not look on us simply as pensionnaires, and the warm welcome of the burly figure with the strong, scarred face as, within an hour of the arrival of any climber he knew, he strode up to greet him will not soon be forgotten.

Zermatt will not be quite the same again without Alexander Seiler.

J. P. FARRAR.

THE ALPINE CLUB LIBRARY.

The following additions have been made to the Library :

Publications of Alpine Clubs.

Akademischer Alpen-Club Basel, 1918.
Jahresberichte 1–2. 1919, 1920
8 × 5½ : pp. 13, 20.

—— **Statuten.** The second issue contains: H. Schobel, Aig. de Chardonnet.
8 × 5½ : pp. 6. 1918

Akad. Alpen-Club Zürich. xxiv. Jahresbericht für 1919. 1920
9 × 6 : pp. 38.
Among the 'neue Touren des Jahres 1919' are the following :—
R. König, Stellihorn : *G. I. Finch,* Pollux Gesammtbegehung d. Nordgrates, Begehung d. Westwand, Nordend ü. d. N.-W. Grat : *E. Hauser,* Mte Rosa, Abstieg S.-W. Grat, Kienhorn ü. d. W. Grat, Gr. Windgälle N.-O. Grat, Ortstock S. Wand : *M. Kurz,* Salbitschyn S. Grat u. S.-W. Wand, Ravetschagrat N., Mettlilücke, Tunnerschhorn, Merzenbachschien N. Wand, Mittaghorn, Blindenjoch N. : *E. Aemmer,* Ruchennadel, Gletschhorn S.-O, Grat :

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M. Liniger, Fünffingerstock N.-O. Wand, Trotzigplanstock S. Grat: *R. Haefeli*, Blackenstock S.-W. Wand, Kl. Spannort S.-W. Wand: *V. A. Fynn*, Mt Aberdeen ü. Aberdeengletscher, Mt King George.

Alpine Club of Canada. Constitution and list of members. 1920
6¾ × 4½: pp. 32.

Appalachian Mountain Club. Register for 1920.
7 × 4¾: p. 110.

Bulletin of the Associated Mountaineering Clubs of North America. 1920
6 × 4: pp. 40.

C.A.F. Congrès de l'alpinisme à Monaco. 1920
8¼ × 5½: pp. 20.

—— Guides et porteurs brevetés au Juin 1920. Large folio sheet.

C.A.I. Bergamo. A Perenne Ricordo dei propri Soci morti per la Patria.
9½ × 5: pp. 56: portraits. 7 settembre 1919

—— **Sucai.** Opuscoletto. Luglio 1919
6¾ × 3¾: pp. 16.

—— —— Inno Sucai. Monza, Tip. Sociale Monzese, 1919
13 × 9½: pp. 5.

—— —— Vade mecum. 1 Ottobre 1919
7 × 4½: pp. 112: ill.

Centre Excursionista de Catalunya. Butlletti any 29, num. 288–299. 1919
9½ × 6¾: pp. 335: plates.
Among other articles are:—
J. M. Soler Coll, Escalció al Biciberri septentrional: *J. Danes i Vernedas*, En hometage a les dones esportistes: *M. Faura i Sans*, Condicions estructurals del terreny en la caracteritzacio de las comarques catalanes: Cataleg de maps de Catalunya (with reprints of early maps of the Pyrenees): *J. Soler i Santalo*, La Val de Tena: *L. Estasen*, El ski a la Vall d'Aran.

Climbers' Club. Rules, list of members. 1920
9 × 6: pp. 18.

Club Suisse de femmes alpinistes (Section de Lausanne). Statuts. 1919
5 × 3¾: pp. 14.

Japanese Alpine Club. Journal. Vol. 14, no. 1. 1920
9½ × 6½: pp. 164.
(In Japanese—a few pages in English.)

Ladies' Alpine Club. (Report.) 1920
4½ × 3: pp. 19.

Ladies' Scottish Climbing Club. Twelfth Annual Record. 1919–1920
4¼ × 3¾: pp. 24.

Mazama. Vol. 5, no. 4. Dec. 1919
10 × 6¾: plates.

Mountain Club of South Africa. Published by the Cape Town Section. 1919
9¼ × 6: pp. 9.

The Mountaineer. Volume 12. Mount Rainier National Park. Second trip encircling the Mountain. December 1919
10½ × 7: pp. 86: plates.

Mountaineers. Prospectus number Mountaineer Bulletin. The Olympics. Fourteenth Annual Outing July 31–August 21. 1920
9¼ × 6¼: pp. 11: ill.

Oe.T.C. Sektion Klosterneuburg. Herzliche Bitte an edelgesinnte Kinderfreunde des Auslandes. 1920
12 × 8½: p. 1.

Rucksack Club. Rules, List of Members, etc. 1920
4¾ × 2¾: pp. 48.

S.A.C. Clubführer durch die Glarner. Alpen. 4te . . . Auflage.
6½ × 4: pp. xi, 295: ill. Genf, Kundig, 1920

—— Association of British Members. Roll of Honour, Service Dinner, List of Members. 1920
7¼ × 4¾: pp. 67.

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S.A.C. Basel. Jahresbericht pro 1919. 57. Vereinsjahr. 1920
6 × 4: pp. 45.
—— —— Sonderbeilage: Die Tierwelt der Alpen einst und jetzt, von Prof. Dr. F. Zschokke.
6 × 4: pp. 48.
—— **Chaux-de-Fonds.** Bulletin annuel, No. 28. 1920
8 × 5: pp. 129: plates.
The articles are:—
E. Robert, De Sierre à Zermatt par le Rothorn de Zinal: *J. Rochat*, Ascension du Weisshorn 1918: *P. Gander*, Au Bietschhorn.
—— **Randen.** Clubtouren pro 1920.
6 × 4: pp. 4.
—— **Säntis.** Die ersten fünfzig Jahre der Sektion Säntis. Herisau 1919
6 × 4: pp. 150: plates.
This interesting jubilee publication has kindly been presented to the Club—"in freudiger Anerkennung seiner Verdienste um den Alpinismus in Freundschaft überreicht."
The contents are:—
Vorläufer des Alpinismus im Alpstein—Vadian, Gessner, Clemens Scherer, Walser, Ebel.
Die Gründung d. S.A.C. und seiner Sektion Säntis: Biographisches, A. Heim, Steiger, Zölper, J. M. Meyer, F. Schläpfer.
Scottish Mountaineering Club. Guide, Section 3. Ben Nevis. Edited by H. MacRobert. April 1920. 5/-
8¾ × 5¾: pp. 42: plates.
Sierra Club. Nineteenth annual outing. 1920
6 × 3½: pp. 16.
Ski-Club di Torino. Itinerari Skiistici nelle valli di Susa—Chisone—Lanzo, illustrati da 53 Fotografie e da 6 schizzi cartografici. 2da edizione. Torino, Eynard. 1920
7½ × 5¼: pp. xv, 119: maps, plates.

Recent Books and Articles.

Abraham, George D. On alpine heights and British crags.
7½ × 5½: pp. xii, 307: plates. London, Methuen (1919)
Allier, Roger. Cahors, Coueslant, 1918
7½ × 5½: pp. 317: portrait.
Life and letters of a lieutenant of the Chasseurs Alpins, killed in action on August 30, 1914. While in the Department of Hautes-Alpes he did a good deal of climbing, of which the Trois Pucelles, Dent de Lanfon and others are here described. While in Paris 'parmi les "rochassiers"—c'est le nom que se donnent entre eux certains membres du Club alpin—ils iraient chercher dans la forêt de Fontainebleau les rochers les plus escarpés et qu'ils n'y grimperaient que par les voies les plus paradoxales. Une révolte d'alpin impénitent contre la vie urbane.'
Almanacco dello Sport. 1918: 1919. Firenze, Bemporad, 1918, 1919
7½ × 5.
Der Alpenfreund. München, April, Mai 1920
11¼ × 8¼: pp. 81–120: plates.
Specimen numbers sent to the Library.
American Geographical Society. Index to the Bulletin 1852–1915. 1918
9¼ × 6: pp. xi, 242.
Augusta praetoria. Revue valdôtaine de pensée et d'action régionalistes. Vol. 1, n. 4–5. Décembre 1919–Janvier 1920
9½ × 6¾: ill.
This contains:—
R. Pampanini, Les parcs nationaux en Italie: *F. Sacco*, La glaciation dans les vallons de St. Barthélemy et de Torgnon: *G. Studer*, Première ascension à la Tête du Rutor. Trans. by W. A. B. Coolidge from Mitt. naturf. Ges. Bern, 1863.

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Bagley, Arthur L. Holiday rambles in North Wales.
7¼ × 4¾: pp. (vi), 203: plates. London, Skeffington, 1920
An interesting book on mountaineering in Wales.

Brunies, S. Le parc national suisse. Bâle, Schwabe, 1920. Fr. 12
8¾ × 5¾: pp. 274: map, plates.

Bushell, William Done Bushell. Cambridge, University Press, 1919. 3/-
7½ × 5¼: pp. 74: plates.

Butler, Frank Hedges. Through Lapland with skis and reindeer.
8½ × 5½: pp. xii, 286: maps, plates. London, Unwin, 1920. 7/6

Canada. The Canadian Northern Rockies through the Yellowhead Pass. 1920
9 × 7¾: pp. 20: ill.

Conway, Sir Martin. Mountain Memories. A Pilgrimage of Romance.
9 × 6: pp. vii, 282: plates. London etc., Cassell, 1920. 21/-

Croft, Sutton. Was Switzerland pro-German? London, Hazell, Watson, 1920,
7¼ × 4¾: pp. 127.

Dalton, Hugh. With British guns in Italy. A tribute to Italian achievement. London, Methuen, 1919. 8/6
7¼ × 5: pp. xiv, 269: maps, plates.
An interesting account of mountain warfare of which not enough has been heard of in England.

Eschmann, Ernst. Der Geisshirt von Fiesch. Eine Geschichte aus dem Oberwallis. Der reiferen Jugend und allen Freunden der Heimat erzählt.
7¾ × 5¼: pp. 268: plates. Zürich, Orell Füssli, 1919

Fischer, Andreas. Hochgebirgswanderungen in den Alpen und im Kaukasus. Neue Folge. Frauenfeld, Huber, 1919. Fr. 11
7¾ × 5¼: pp. 226: plates.
Contains:—
Zwei Kaukasus-Expeditionen 1890: Vom Leben der Bergführer: Eiger und Almer 1893: In d. Ital. Alpen (Adamello, Brenta) 1894: In d. Grajischen Alpen 1910.
Good plates. The first vol. was issued in 1913.

Fisher, L. C. Snowfall on Mount Rainier. In Monthly Weather Rev. U.S. Depart. Agric. vol. 46, no. 7. July 1918
12 × 9½: pp. 327–330: plates.

Geographical Journal, vol. 55. January–June 1920
9¾ × 6¼: pp. viii, 496: maps, ill.
There are no articles of mountaineering interest in this vol.

Griffin, A. A. Influence of forests upon the melting of snow in the Cascade Range. In Monthly Weather Rev. U.S. Depart. Agric. vol. 46, no. 7.
12 × 9½: pp. 324–7: plate. July 1918

Harlé, Edouard. Les premiers travaux de construction de l'observatoire du sommet du Pic du Midi. In Bull. de l'Observ. Bordeaux, Université Toulouse. Bordeaux, Gounouilhou, 1919
9 × 6: pp. 51: ill.

Hug, Mrs. Lina, and Stead, Richard. Switzerland. Revised and enlarged edition. London, Unwin: New York, Putnam, 1920. 7/6 net
7½ × 5: pp. xxxvi, 479: plates.
There have been four impressions of this work since first published in 1891. This is the second edition. It is a good short history of Switzerland to the present day.

Huxley, Leonard. Life and letters of Sir Joseph Dalton Hooker, O.M., G.C.S.I. Based on materials collected and arranged by Lady Hooker.
London, Murray, 1918
2 vols.: 8½ × 5½: pp. xi, 546: vii, 569: map, portraits.

Jeffers, Le Roy. Books of the desert and the mountains. In the Bookman, New York, vol. 50, no. 6. February 1920
9½ × 6½: pp. 556–562.
Presented by the author.

—— Up an unclimbed mountain. First ascent of Mt Moran. In New York Times. April 11, 1920

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Lunn, Arnold. Cross-country ski-ing. London, Methuen (1920). 5/-
7 × 4½ : pp. viii, 118 : plates.

Mercanton, P. L. Rapport de la Commission des glaciers pour 1918–1919. S.A. Verh. d. schw. Naturf. Ges. Lugano 1919
9 × 6½ : pp. 3.

Meunier, Stanislas. Les Glaciers et les Montagnes. Bibliothèque de Philosophie scientifique. Paris, Flammarion, 1920. Fr. 3.75
7½ × 4¾ : pp. (ii), 262.
Contains :—
La forme générale d. glaciers : Conditions essentielles d. localité à glaciers : L'activité dynamique d. glaciers : Travaux géologiques d. glaciers : Trace d. glaciers disparus : Hypothèse de l'époque glaciaire : L'évolution glaciaire : La capture d. glaciers : Sommaire.

National Parks Association, Washington, U.S.A. Objects. 1920.
9 × 6 : pp. 6.

New Guinea. Expeditie naar het centrale bergland. In Tijds. k. nederl. Aaardr. Genootschap. Maart 1920
9 × 6 : pp. 253–4.

Oberland. Grimmi-Alp. Meiringen, Brügger, 1920
6¾ × 5 : pp. 32 : plates.

Piggott, Percy P. Burrow's guide to the Lake District. A Practical Handbook for the Tourist, with a special article upon Mountain Passes, Walks, and Rock Climbs by Mrs. Dora Benson.
Cheltenham and London, Burrow, 1920. 2/-
7 × 4½ : pp. 120 : maps, plates.

—— Burrow's guide to North Wales. A Practical Handbook for the Tourist by Railway or Road, with a special article upon Mountain Walks and Rock Climbs by Mrs. Dora Benson.
Cheltenham and London, Burrow, 1920. 2/-
7 × 4½ : pp. 130 : maps, plates.

Pyrénées. Les guides bleus. (A. Dauzat.) Paris, Hachette, 1919
6 × 4 : pp. lxxvi, 514 : maps, panoramas.
A new edition of Joanne, now under the general editorship of M. Monmarché. This volume has been re-edited by M. Dauzat and has an introduction by M. F. Schrader.

Raeburn, Harold. Mountaineering Art. London, Unwin (1920). 16/-
7½ × 5 : pp. xii, 274 : plates.

Seiler, Alexandre. In 'Confédéré de Martigny.' Mars 1920
In Memoriam.

Smyth, Ethel. Impressions that remained. London, Longmans, 1919
Typed copy of pp. 55–6 of vol. 2, referring to mountaineering.

Soubiron, Pierre. Les Pyrénées du Pic d'Anie au Canigou en 30 Excursions. Guide Soubiron. Toulouse, chez l'auteur, 1920. Fr. 14
7½ × 5 : pp. 398 : sketch maps.

—— —— The same in 30 parts. Fr. 7.50

Stéphani, Philippe. Les tunnels des Alpes. Paris, Dunod, 1919. Fr. 6
9 × 5½ : pp. 116 : plans.

Sykes, Ella and Sir Percy. Through deserts and oases of Central Asia.
8½ × 5½ : pp. xii, 340 : map, plates. London, Macmillan, 1920. 21/-
Miss Sykes and her brother left for Kashgar in March 1915, crossing the Tian Shan by the Terek Pass. The country and people of Kashgar and the Pamirs are well described. The second volume describes Chinese Turkestan. The volumes are well illustrated.

Symonds, Margaret. A child of the Alps. London, Unwin (1920). 7/6
An interesting novel of a mingled artistic and peasant nature in a girl.

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Travel. Handbook of travel prepared by the Harvard Travellers' Club. 7 × 4¼: pp. 543. Cambridge, U.S.A., Harvard University Press, 1917
Articles on equipment, surveying, etc. An article on Mountain Climbing by Howard Palmer, pp. 156–174: ill.

United States. Depart. of Interior. Report of the Director of the National Park Service for the year ended June 3, 1919.
9 × 5¾: pp. 384: maps, plates. Washington, Govt. Print. Office, 1919

v. Valkenburg, S. Het ontstaan der dalvormen in de zwitsersche alpen. In Tijds. kon. nederl. aardrijksk. Gen. vol. 37, no. 4. Juli 1920
8½ × 6½: pp. 458–481.

Walcott, Chas. D. Geological explorations in the Canadian Rockies. In Smithson, Misc. Collections, vol. 68, no. 12: Explorations in 1917.
9½ × 6½: pp. 1–20: plates. Washington, June 1918
Panoramic photograph of Wolverine Pass, B.C., with Mounts Gray and Drysdale.

Wales. Handbook to North Wales. London, Ward Lock, 1920. 3/6
6¾ × 4¼: pp. 232, 184: maps, plates.
An excellent general guide-book.

Wilcox, Walter D. Weighing the mountains. In Bull. Geogr. Soc. Phil. vol. 18, nos. 1–2. January–April, 1920
10 × 6¾: pp. 26–30.
The author makes a rough valuation of certain mountains as to height, steepness, forests, etc., and comes to the conclusion 'that the Matterhorn is probably the finest mountain in the world, with possibly a close second or equal in one of the great Himalayan peaks.'

Younger, W. Ascent of Ruwenzori. In Geogr. Journ. London, vol. 56, no. 1. July 1920
9¾ × 6½: pp. 73–4.
Mr. Younger, Superintendent of Police, and Mr. C. Henry, District Commissioner, Portal, made an ascent to the rocky knob on Kiyanja, a quarter of a mile to the south of the true top.

Older Works.

à Beckett, Gilbert Abbott. The comic history of Rome illustrated by John Leech. London, Bradbury and Evans [c. 1860]
8½ × 5½.
Typed copy of pp. 172–5, Hannibal's crossing of the Alps.

Brennwald, Alfred. Vues pittoresques du Lac des Quatre Cantons et de ses environs. 32 aquarelles d'après les originaux de différentes artistes.
5½ × 7½: pp. 81: col. plates. Lucerne, Schleicher [c. 1882]

Brown, Horatio F. John Addington Symonds. A biography compiled from his papers and correspondence. London, Smith, Elder, 1903
8 × 5½: pp. xxiv, 405: portrait.

Butler, W. F. The Great Lone Land: A narrative of travel and adventure in the north-west of America. 5th edition. London, Sampson Low, 1873
6½ × 5: pp. xi, 386: map, plates.

Canada. Description of and guide to Jasper Park. (M. P. Bridgland, R. Douglas, E. Deville.) Ottawa, Depart. Int. 1917
7 × 5: pp. 96: map, plates.

Crawford, E. May. By the equator's snowy peak. London, C.M.S., 1913
7 × 5: pp. 176: map, plates, one of Kenia coloured.

Daunt, Achilles. Crag, glacier, and avalanche. Narratives of Daring and Disaster. London etc., Nelson [c. 1880]
7 × 4¾: pp. (vi) 212: plates.

Denholm, James. A tour to the principal Scotch and English lakes.
8 × 5: pp. vi, 306: map. Glasgow, Macgoun, 1804

Desbarolles, Ad. Voyage d'un artiste en Suisse à 3 francs 50 par jour. 2me édition. Paris, Lévy, 1862
7 × 4½: pp. 356.

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Douglas, David. Journal during his travels in North America 1823–1827. Published under the direction of the Royal Horticultural Society.
9¾ × 6 : pp. vi, 364 : portrait. London, Wesley, 1914

Dubuis, Henri. Souvenirs de mes ascensions au Mont-Blanc et au Cervin, suivis de L'alpinisme en général. Conférence donnée à Prangins, le 26 février 1908. Nyon, Aubert, 1908
7 × 4¾ : pp. 52.

Gilpin, William. Voyages en différentes parties de l'Angleterre, et particulièrement dans les Montagnes and sur les Lacs du Cumberland and du Westmoreland. Paris, Maisonneuve : Londres, Blamire, 1789
2 vols. : 7¾ × 5 : pp. xix, 341 : xvi, 348 : plates.

Harrison, Frederic. John Ruskin. London, 1903
Note on p. 38. 'The present writer remembers his own first view of the Alps from Schaffhausen at the end of a hard day ; and after forty visits to the Alps cannot forget the emotion he felt at the sudden sight, nor can he ever see the eternal snows without a choking sense in the throat. There is no home-sickness, no patriotism, like that of the mountaineer.'

Hutchings, J. M. In the Heart of the Sierras. The Yosemite Valley, both historical and descriptive. Yosemite Valley, Old Cabin, 1886
8½ × 6 : pp. xii, 496 : plates.

Joanne, A. Itinéraire général de la France. Jura et Alpes françaises.
7 × 4½ : pp. lv, 1088 : maps, etc. Paris, Hachette, 1877
—— —— (2me édition.) 1882
7 × 4½ : pp. lv, 1091 : maps, etc.

Leduc, St. Germain. Les vacances en Suisse. Journal du Voyage d'un Collégien ; publié par St. Germain Leduc.
2 vols. pp. iv, 261, 247 : map, plates. Paris et Strasbourg, Levrault, 1837

Letonneller, G. Documents relatifs aux variations des glaciers dans les alpes françaises. In Bull. de la Section de Géographie, Ministère de l'Instruction publique, t. 28, Nos. 1–2. 1913
9¾ × 6½ : pp. 288–295.
An extremely interesting set of extracts on the movement of the glaciers of the Chamonix Valley at various dates from 1580 to 1730 taken from the Arch. comm. de Chamonix and elsewhere.

Lullin, Ed. Le chemin de fer Viège à Zermatt. Lausanne, Bridel [c. 1892]
7 × 4½ : pp. 47 : col. plates.

Montagu, Lady Mary Wortley. Letters. . . . London, Homer, 1766
5 × 3½ : pp. viii, 232.

de Mortillet, Gabriel. Guide de l'étranger dans les départements de la Savoie et de la Haute-Savoie. Chambéry, Perrin, 1861
7½ × 4¾ : pp. 459 : map, plate.

Norgate, Edward. Miniatura, or the Art of Limning. Edited from MS. c. 1650.
7½ × 5½ : pp. 111. Oxford, Clarendon Press, 1919. 5/–
p. 43 : 'Nothing more in art or nature affording soe great variety and beautie as beholding the farre distant mountaines and strange scituation of ancient castles mounted on almost inaccessible rocks, whereof in Savoy and Piedmont after you have passed La Tour-du-Pin many are to be seene, and in some places with precipices desperately falling into the Lezere, and other torrents about the Alps that with a roaring noise make hast to breake their necks from those fearful rocks into the sea. Of these many strange yet very beautifull views are to be seene from and about Mont Senis, Launebourg, Novalaise, and about Mont Godardo in Germany, and many other places about Provence, most of which have been very well designed after the life by Peter Brugell of Antwerp, and remaine in stampe to his great comendation.'

Rambert, Eugène. Villars-Chésières et les Alpes vaudoises. Discours d'ouverture de la fête du C.A.S. Extr. de la Gaz. de Lausanne des 28–30 septembre 1885. Lausanne, Vincent, 1885
7½ × 4½ : pp. 44.

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de Saint-Saud, A. Le Pic de Tres-Aguas, Cantabrie. In Bull. de la Section de Géographie, Ministère de l'Instruction publique, t. 28, Nos. 1–2. 1913
9½ × 6½: pp. 285–287.

Schweichel, R. La Neige de la vallée d'abondance. Nouvelle montagnarde savoisienne. Lausanne, Blanc: Paris, Libr. Suisse romande, 1870
7¼ × 4⅝: pp. 216.

Scotland. Journal of a tour through the highlands of Scotland.
7½ × 5: pp. xvi, 326: 23. Norton Hall, 1830

Shoberl, Frederic. The world in miniature. Tibet. . . .
5½ × 3½: pp. 107. London, Ackermann [c. 1830]

Skye. Eilean a' cheò. The isle of mist. (Second edition.)
7 × 4½: pp. 129. Edinburgh, Wilson (1917)

South Africa. Mountaineering in S. Africa. Cape Town, Argus Co., 1914
8½ × 5½: pp. 62: plates.
Presented by S. F. Goggs, Esq.

Tozer, Henry Fanshawe. Researches in the highlands of Turkey: including visits to Mounts Ida, Athos, Olympus, and Pelion. London, Murray, 1869
2 vols. 7¾ × 5¼: pp. xi, 297: vii, 390: map.

Tyndall, John. Hours of exercise in the Alps. 2nd edition.
7¾ × 4¾: pp. xiv, 475: plates. London, Longmans, 1871

Wagnon, Aug. Autour de Salvan, excursions et escalades de la Dent du Midi au Buet. Notice botanique par H. Jaccard.
7½ × 5¾: pp. 78: 17. Morges, Centlivres, 1885

Whitehouse, Wallace E. Descriptive handbook to the Relief Model of Wales.
9¾ × 7½: pp. 62: plates. Cardiff, Museum, 1915
Two portions of the model are of the Snowdon and of the Cader Idris districts. Descriptions and plates are here given.

Williams, John H. Yosemite and its high Sierra.
10 × 6¾: pp. 146: plates. Tacoma and S. Francisco, Williams, 1915

Zdarsky, Mathias. Elemente der Lawinenkunde mit einem Anhange: 'Einige hygienische Winke.' Höchstes Kommando in Kärnten, 1916
6¼ × 4½: pp. 23.

ALPINE ACCIDENTS IN 1920.

On August 9 Professor Henry Eberli of Zurich, aged sixty-three, left the Simplon Kulm, alone, to ascend the easy Hübschhorn. No trace of him has been found since, notwithstanding the most strenuous researches instituted by the family and by Herr Kluser, the proprietor of the hotel.

Professor Eberli was a competent climber, properly equipped and in sound bodily condition, and his disappearance on an ascent offering no difficulties is inexplicable.

He was educated at Winterthur, at the University of Zurich, and at the Sorbonne. Subsequently he was a schoolmaster in this country for about seven years, and then head of a municipal school at Ghent. Since 1899 he was a master at the Cantonal School at Zurich, where his industry and high sense of duty offered a precious example to his pupils.

He spent all his holidays in the Alps, and was an untiring and careful climber with a good eye for country, frequently conducting, without guides, parties of his pupils on ascents of moderate difficulty.

He had an extraordinary mastery of the English language and was

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the author of an 'Anthology of the Poetry of the Alps,' 'A. W. Moore, a British Mountaineer,' and other works which bear testimony to an unbounded capacity for methodical and painstaking work and to his love for the mountains. He was a brother of our member Mr. J. Eberli.

On July 21 the Herren F. ALTMANN, G. Horatschet and B. Bosset attempted to ascend the S. face of the DACHSTEIN by the so-called Pichl route—a very formidable and long climb which their previous experience did not warrant their undertaking. About 4 P.M., when just below the very difficult, long, black Kamin, the decisive point of the climb, Altmann, the leader, fell, probably through the giving way of a hand or foothold. The rope broke, and so the two others escaped, but were unable to move without assistance. Herr Pichl himself happened to be on the summit and was a witness of the occurrence. Quickly getting together a party, he rescued the two others at 2 P.M. next day, while the body of the victim was recovered by the guide Georg Steiner.

ALPINE NOTES.

'BALL'S ALPINE GUIDE.' THE WESTERN ALPS.—Copies of the new edition (1898) of this work can be obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. Price 12*s.* net.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—A new edition (1907) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of A. V. Valentine-Richards, Fellow of Christ's College, Cambridge, can be obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. It includes those portions of Switzerland to the N. of the Rhône and Rhine valleys. Price 6*s.* 6*d.* net.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART II.—A new edition (1911) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of the Rev. George Broke, can be obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. It includes those Alpine portions of Switzerland, Italy, and Austria which lie S. and E. of the Rhône and Rhine, S. of the Arlberg, and W. of the Adige. Price 7*s.* 6*d.* net.

MAP OF THE VALSESIA.—Some copies of the Map issued with the ALPINE JOURNAL, No. 209, and of the plates opposite pages 108

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and 128 in No. 208, are available and can be obtained from the Assistant Secretary, Alpine Club, 23 Savile Row, W. Price for the set (the Map mounted on cloth), 3*s*.

GUIDE DES ALPES VALAISANNES.—Vol. III., du Col du Théodule au Simplon, has just been published. The price of the volume (to members of the S.A.C.) is 5fr. 15c. Post free from the Quæstor of the respective section. The book is so well furnished with route-marked illustrations that a very scanty knowledge of French suffices for its use.

The volume from the Col Ferret to the Théodule is in the press.

Volume IV., du Simplon à la Furka, par Marcel Kurz, has just appeared.

THE ALPINE CLUB OBITUARY.—

	Date of Election.
Hermann Woolley	1888
C. S. Bayley	1889
E. A. Broome	1889
M. J. Dixon	1893
A. McAndrew	1907

SIR THOMAS CLIFFORD ALLBUTT, K.C.B., &c., &c.—The King has been graciously pleased to approve that Sir Thomas Clifford Allbutt, K.C.B., M.A., M.D., D.Sc., &c., be sworn a Member of his Majesty's Most Honourable Privy Council.

MILITARY HONOURS FOR WAZIRISTAN CAMPAIGN.—Simla, June 11. —The following details of acts for which immediate awards have been given for gallantry and distinguished service in the field in connection with the operations of the Waziristan Force are published:

MILITARY CROSS.

'Captain Henry Darrell Minchinton, 1-1st (K.G.O.) Gurkha Rifles, attached 2-9th Gurkha Rifles.—For conspicuous gallantry in action and fine leadership. During the withdrawal down the Badder Toi, on April 8, when his company had been ordered to retire through the rearguard party, the enemy followed up closely, and suddenly opened a hot fire at close range. Captain Minchinton remained behind with a few men who had not already withdrawn and assisted in the withdrawal of a picquet of another unit. When forced to retire to a less exposed position in the rear he went forward again with a non-commissioned officer to recover a casualty, and covered the bringing in of the wounded man by giving covering fire himself. By his sense of duty, and disregard of danger, he

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materially assisted the bringing in of a picquet under difficult circumstances, besides checking the enemy and helping to bring in a wounded man, who would otherwise have fallen into the enemy's hands.'

A MOUNTAINEERING EXPEDITION TO NORWAY IN 1855.—Mr. A. F. R. Wollaston sends the interesting note given below.

Mr. Eardley J. Blackwell was climbing in the Alps as early as 1850 (*cf.* Mr. Coolidge's *The Alps in Nature*, 231–3, and 'A.J.' xxxii. 53), and made in 1854 the virtually first ascent of the Wetterhorn from Grindelwald. It is to be regretted that no further information is available of the mountaineering career of a very strong and determined climber.

In looking through letters and journals connected with a Life of the late Professor Alfred Newton, F.R.S., of Magdalen College, Cambridge, I have come across allusions to a mountaineering expedition in Norway of a very early date. As there is, so far as I am aware, no note about this in the ALPINE JOURNAL, the following details may be worth recording.

In the spring of 1855 two young Cambridge graduates and naturalists, Alfred Newton (afterwards Professor of Zoology at Cambridge and F.R.S.) and W. H. Simpson (afterwards called Wilfred Hudleston, F.R.S.) made a voyage to Lapland, where they joined their friend John Wolley, a well-known ornithologist of that time. Mr. Simpson kept a very complete journal, and in it occur the following entries, which may be of interest to students of mountain exploration.

'May 18, 1855. Left Shelford early. Meet Newton at Ely and compare notes with him to Peterborough, where we first encountered Eardley J. Blackwell on his way to Norway with Gideon Balmat the Chamouny guide. Of Blackwell I had heard much during my visit to Switzerland last year, as a great mountaineer, he having ascended the Wetterhorn, whilst I was staying at Interlaken. He knew Norway well, having travelled there before in company with Biddulph, and was now taking every necessary apparatus for a prolonged residence in the Jotun Fjeld. He had 600 lbs. of luggage, comprizing tent, bedding, camp-equipage, preserved meats and all sorts of things. We dined together at Hull, but the accommodation was indifferent.

'May 19. Off at 7 A.M. Amongst our passengers were Mr. Lund and his wife (who never appeared until we got across), Blackwell and Balmat, Scott and Torr, and some Norwegians; all fraternized well.

'May 22. Christianssand. Missed the Bergen steamer, for which I was very glad, as I wished to see something more of Blackwell, Scott and Torr—all three very good fellows.

'May 23. Christiania. Blackwell of immense service in choosing carrioles.

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'May 25. Minde. Blackwell said there was a very wild district between here and the Glommen, where Elks had lately been killed.

'Our party met for the last time together at supper here, and sorry I was that it should be so, for we had been remarkably merry hitherto and indeed, apart from this, Blackwell was of immense service to us all from his knowledge of the language and the people.'

(Newton and Simpson were in a hurry to reach Trondhjem to catch the steamer to Hammerfest, so they parted at Minde from Blackwell and Balmat, who followed more leisurely along the same road to the Jotun Fjeld. It would be interesting to know who Biddulph was.)

A. F. R. Wollaston.

Mr. Slingsby writes to Captain Farrar:—

'In the late fifties, the sixties and early seventies the name of Blackwell was well known in Central Norway, where he had a house and, I think, a good deal of land in Vaage, a rich and fertile district on the Northern edge of the sterile Jotun Fjelde, in which wild terrain he used to go reindeer stalking, especially in the rugged glens which converge on Lake Gjendin—the scene later of "Three in Norway, by two of them." He married a very handsome Norse girl, who came to London with him, how often I do not know. I think they had a family.

'Once I crossed the North Sea with Du Chaillu, who was on his way to pay a second visit to Blackwell, whom he knew very well. Blackwell would certainly know something of the glaciers in the wild Leirungsdal, as well as those of Knvtshvltind. Of the two great rival sports in Norway, reindeer stalking and mountaineering, undoubtedly the former was that which appealed the strongest to the "Engelskmand Blackwell," who is still remembered with great respect in Vaage. About his mountaineering very little is known.'

The Main Ridge of the Black Cuillin.—Mr. Geoffrey Howard sends the following note of the time lately taken by Mr. T. Howard Somervell on this ridge:

Left Glen Brittle	7.11 A.M.
Top of Gars Bheinn	9.16
Sgurr nan Eag	9.58
Sgurr Dubh na Dabheinn . . .	10.41
Alasdair	11.43
Tearlach	11.50
Mhic Choinnich	12.18 P.M.
Dearg (inaccessible Pinnacle) . .	1.17
Dearg Cairn	1.25 to 2.11 (rest)
Banachdich	2.40
Ghreadaidh	3.32
Mhadaidh	3.50
Bidean Druim nan Ramh . . .	4.42 to 5.0 (rest)

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Sgurr na Fhionn Coire	6.13
Bealach nan Lice	6.20 to 6.50 (rest)
Bhasteir (*via* Tooth) (Naismith's route)	7.21
Sgurr nan Gillean	7.45
Sgurr H'Uamha	8.05
Sligachan	9.29

Total, 14 hours 18 minutes.
Total rest, 1 hour 34 minutes.
Total on ridge, 9.16 to 8.05 = 10 hours 49 minutes.

Mr. Leslie Shadbolt in reply to an enquiry writes :—

'I traversed the ridge of the Coolin in 1911 with A. C. McLaren, and we took, apparently, the same route as Mr. Howard Somervell. We took it as an ordinary climbing expedition and were concerned only to fit the climb to the limits of a reasonable day. We started fast but slowed down about noon when we saw we had time in hand. I sent a note of times to the *S.M.C. Journal*, as up till then the estimates of time required to do the expedition had varied much, and many people thought it could not be done in a day. We took 16¾ hours altogether including halts. I think Mr. Howard Somervell's times are remarkably fast and would mean very hard going all day long.

'I have details of all our times if you want them, but I think they are not of very great interest and it would be rather a pity to set up a competitive standard for a fine climbing expedition of this sort.'

SCHWEIZER ALPEN-CLUB.—The published accounts to December 31, 1919, give the following information :—

Total number of Members, including 3308 new Members	17,962
Total income, inclusive of the gross receipts from the *Jahrbuch*	Frs. 173,927 = £6957

The principal items of expenditure are :—	Frs.
New huts	6,400
Repairs to huts; furniture, insurance, &c.	5,717
Alpina	25,184
Jahrbuch, Vol. 53	82,334
Assurance of guides	5,410
Instruction of guides	2,401
Part assurance of Members	13,354
Rescue arrangements	3,336
Various subventions	2,300
Reserve fund for amortisation of stock of Guide-books, &c.	20,000
General expenses, &c.	23,785
	190,221 = £7609

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WHAT IS A SPORTSMAN?—As I understand the breed, he is one who has not merely braced his muscles and developed his endurance by the exercise of some great sport, but has in the pursuit of that exercise learnt to control his anger, to be considerate to his fellow-men, to take no mean advantage, to resent as a dishonour the very suspicion of trickery, to bear aloft a cheerful countenance under disappointment, and never to own himself defeated until the last breath is out of his body.

(the late) W. E. T. BOLITHO,
Lieutenant-Colonel.

September 5, 1918.

Colonel Bolitho was the old Harrow and Oxford cricketer and a very good all round man.

(Sent in by Mr. Claude Macdonald.)

DR. ALEXANDER SEILER AND AUGUSTIN GENTINETTA.—In the course of a sermon preached on July 25 in the English Church at Zermatt Canon Durham made the following allusion:—

'There are lights and shadows on the hills; and as I watch the shadows they speak of those which fall athwart our lives. Many of us since last we looked upon the Alps have known sorrows of which we hardly dare to think. But it is not of the shadows that have fallen on our homes that we would speak to-day. There are shadows here in Zermatt too; there are sorrows mingling with our joy in being here again. There are faces which we miss; there are hands which we shall never clasp again. Here in this English Church this morning I express for the English visitors to Zermatt the deep regret we feel at the death of Herr Alexander Seiler. We English have ever had a kindly—and more than a kindly—welcome here in Zermatt, and from none more than from the late Herr Seiler. He was at all times a friend to us; but it was when the war broke out that we learnt how good a friend he was. I was not myself then at Zermatt, but I know, and many of you know, what happened—how Herr Seiler told his English guests that his hotels were at their disposal as long as they cared, or were compelled, to stay; and not only so, but that none need think of payment till after their return, while he was ready to advance money to any who required it. We cannot thank him now in person, but we can and do express our true and lasting gratitude, and our sympathy with all members of the Seiler family.

'There are others whom we miss to-day in Zermatt. Among the guides, Augustin Gentinetta, a man highly esteemed in the community, beloved by those of us who had been his companions on the mountains—and his brother Joseph. It saddens our return to the Alps that they are no longer here, but we would like to think that they may know that English friends cherish their memory, and here in our English Church we commend them to Him Who is their God and ours.'

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THE LATE FREDERICK GARDINER.—In the notice on p. 99, the date of his ascent of the Matterhorn is given as 1870 instead of 1871, and on p. 102 it should read that he was elected a member of the Club in 1871 and a member of the Committee in 1879.

LE C.A.F.—M. Jacques de Lépiney writes that a 'Groupe de Haute Montagne' has been formed, the principal object of which is the furtherance of guideless climbs.

VISITORS TO THE HUTS OF THE S.A.C.

	1917	1918	1919
Bétemps	216	260	705
Schönbühl	318	233	306
Dom	54	73	216
Weisshorn	43	65	124
Mountet	365	317	557
Bertol	330	265	595
Chanrion	412	227	570
Panossière	225	230	420
Orny	683	626	1005
J. Dupuis	743	623	1125
Britannia	465	556	925
Solvay	54	57	
Mutthorn	807	964	
Oberaletsch	77	102	168
Koncordia	774	790	805
Finsteraarhorn	205	205	564
Strahlegg	172	217	277
Gleckstein	216	196	491
Damma	116	95	146
Clariden	1084	976	1292
Fridolin	477	399	629
Boval	1537	904	1739
Tschierva	605	494	
Sciora	48	19	14

MONT AIGUILLE.—The fourth ascent of the N. face was done on June 1, 1919, by MM. Plossu and Main. The ascent took three hours and was a variation on M. Escarra's route described in *La Montagne*, xii. 1916, p. 1.

THE MEIJE.—The same climbers made the second ascent by the route Brèche de la Meije—Brèche du Petit Doigt and the Glacier carré (August 2, 1919).

WINTER ASCENTS.—In 'A.J.' xxxii. 275, is a note of a winter ascent of the DENT D'HÉRENS by Herr Hafers, said to be the first. The first winter ascent was, however, done on January 16, 1910,

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by Signor Mario Piacenza with G. B. Pélissier and G. Carrel, from the new Rifugio Aosta (Rivista Mensile, 1910, 158). Hafer's ascent is the second. I did the third on January 28, 1920.

All the higher peaks of the Pennine range have now been ascended in winter.

In February I succeeded in ascending the last two, viz. Ober Gabelhorn and Täschhorn. Thanks to the good conditions and fine weather these ascents did not require much more time than in summer. I did both expeditions alone with Josef Knubel, who is at any rate the best winter guide in Zermatt. The particulars are as follows:

February 3.—Ober Gabelhorn. Left Trifthotel 4.45 A.M. On ski up to the Schulter of Wellenkuppe, where ski were left (8.45–9.20). Wellenkuppe 10.10. Top of Grd. Gendarme 10.50–11.05 (about 100 feet of rope have been fixed to the N. side of the Grd. Gendarme last summer by the 'Führerverein' of Zermatt). Foot of final rock ridge 12.05–12.20 P.M. Top Gabelhorn 12.50–1.10. Grd. Gendarme 2.0–2.10. Top of Wellenkuppe 3.10–3.20. Ski 3.50–4.05. Trifthotel 5.10.

On January 31 and February 1 it snowed incessantly in Zermatt. In spite of that we found the mountain in pretty good condition.

On February 4 we ascended Schallihorn (1st winter ascent) with ski up to the Ob. Schallijoch.

February 7.—Täschhorn. Left Hotel Täschalp 3.15 A.M. (moonlight)—on ski to the foot of Weingarten moraines. Then with crampons on hard snow. Halt on Weingartengl. 5.45–6.05. Rock rib (between 2 branches of Weingartengl.) at about 3700 m. 7.40–8.30 (—22° Celsius!); Mischabeljoch 9.40–10.15. Summit (by S.E. arête) 12.45–1.20. Back at Täschalp 5 P.M.

Mountain in excellent condition. Splendid weather, but N. wind very cold.

On February 10 I ascended the Matterhorn with Knubel by the Hörnli arête (5th winter ascent). We intended to come down by the Z'Mutt arête, and took raquettes with us to the top. But a furious S.W. wind prevented our trying the proposed descent, as that side gets no sun all day, so we descended same way. I never saw the Z'Mutt arête in better condition. On the ordinary route we found more snow than usual as far as the Solvay hut, but higher up the conditions could not have been better, all ropes being free and the rocks perfectly dry. We found the old steps on the shoulder. The ascent took us 5 hours actual going.

Marcel Kurz.

Neuchâtel, March 15, 1920.

The S. face of M. Blanc ('A.J.' xxxiii. 129), Mr. Oliver writes:

Courtauld and I with Aufdenblatten climbed the Innominata two days before our ascent of Mont Blanc, in order to examine the

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route very carefully. We then definitely decided that the left-hand arête was the proper route to the summit. The points in doubt were:

(*a*) Whether the continuation on the face of Mont Blanc of the Fresney arête (*i.e.* right-hand arête) could be climbed. This cannot be seen from the Innominata or the Aiguille Noire or any other point I had previously reached.

(*b*) At what point we should cross the great couloir, but it was evident that we ought to cross it as high as possible to avoid risk of stone falls.

The height at which we left the Fresney arête was, according to the aneroid, about 13,600 feet, and I noticed that we were then considerably higher than the Aig. Blanche, and apparently somewhat lower than the Jorasses. From this point we were able to trace our route across the couloir and on to the left-hand arête.

We did not therefore seriously examine the possibility of continuing on the Fresney arête to a higher point, but the continuation certainly looked uninviting. Moreover, even if the ascent of the Fresney arête could be continued to its end, it joins the second arête at a point considerably below where the latter meets the Brouillard ridge.

There are two or three very difficult rock pitches shortly below our breakfast place, one of which was climbed by Adolphe Rey (a great rock expert) by standing on his brother's head. If one looks at this pitch from down below, it seems very difficult, while the pitch next above it (though, in fact, it is less difficult) looks from down below quite impossible.

THE FATAL ACCIDENT ON THE CRAST' AGÜZZA SATTEL.—It will be remembered that the bodies of the three Swiss tourists who fell into a deep crevasse could not be recovered. To mark the place, as well as the rate of progress of the glacier, a stout brass cylinder 8 ins. long and 4 ins. diam., containing details of the accident, has been lowered into the crevasse. It is calculated that it should reach Morteratsch in 100 to 150 years.

HERR ERNST PÜHN, the well-known German climber, who had to his credit all the 4000$^{m.}$ summits, was killed in a carriage accident near Evolena.

The ALPINE JOURNAL, vols. vii.–xxvii, half bound in leather, in perfect condition, and vol. xxviii in parts, is for sale. Apply Canon Burn, The Vicarage, Halifax.

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HIMALAYAN NOTES.

In reference to my estimation of the height of my final camp on Kamet as about 23,000 ft. by comparing it with the heights of Kamet and Eastern Ibi Gamin, seen both from E. and W. ('A.J.' vol. xxxiii. p. 73, 1920), I should like to add that Mr. Heawood, librarian of the Royal Geographical Society, has very kindly supplied me with all the information available as to the height attributed to Eastern Ibi Gamin by R. Strachey. Mr. Heawood quotes from the paper on the 'Physical Geography of W. Tibet,' by H. Strachey (*R.G.S. Journal*, vol. xxiii. pp. 2–69, 1853), in which Strachey says that his brother ascertained the heights of the points of 'the two chief spurs' of Kamet to be 'about 24,000 feet.' The method used consisted of 'purely geometrical operations, which assure the results within one or two hundred feet.' The two points are the Eastern and Western Ibi Gamin of my article. Longstaff's map ('Five Months in the Himalaya,' by A. L. Mumm) gives 24,170 ft. for Eastern Ibi Gamin.

C. F. Meade.

August 1920.

Mount Everest.—On June 23 a deputation representing the R.G.S. and the A.C. waited on the Secretary of State for India with the object of enlisting the sympathy of the Government of India in the proposed expedition to Mount Everest. In the unavoidable absence of Mr. Montagu, the deputation was received by the Right Hon. Lord Sindha, supported by Sir Arthur Hirtzel, K.C.B. The case was put very fully by Sir Francis Younghusband, President of the R.G.S., and in reply Lord Sindha assured the deputation that the Indian Government would, on a suitable occasion, readily render such assistance as lay in its power. The A.C. was represented by General Bruce and by Captain Farrar (in the unavoidable absence of the President).

REVIEWS.

Mountain Memories: A Pilgrimage of Romance. By Sir Martin Conway, M.P. (Cassell. 1920.) 12*s.* 6*d.*

Sir Martin Conway is a climber with a strongly-marked personality; all mountain lovers will be grateful to the sudden impulse which prompted him to write a mountaineering autobiography, and to write it in a mood which finds expression in such an appeal as this: 'Reader, if you and I are to be real comrades, we must share the same adventures of fancy and of soul. You must see my whales and elephants in the clouds and must leap to the same god-given

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revelation whether in art or nature. My fairies must be thy fairies and my gods thy gods.' Conway has done his share towards making such a partnership possible.

His sub-title is no mere piece of decorative verbiage. Earnestly he proclaims himself a romantic and his theme the pursuit by a climber of the romantic ideal. What romance means to him the reader soon learns. The mountains provide one door into its kingdom, but there are many such doors. 'It can be found, by those whom the gods love, in all careers and in every society.' Most of us would gladly be romantics in Conway's sense. Perhaps many of us inadequately are, but it is only given to a few to translate their romantic longings into action as he has done.

His first effort in this direction, an attempt to start for Australia, ended miserably amid the cruel laughter of the grown-ups, but he was then only five years old. This is an exquisite bit of child-history, beautifully told, and the same may be said of the whole story of his childish strivings after independent adventure and his earliest mountain ascents—the Worcestershire Beacon (aged six) and Snowdon (aged seven). In an equally charming chapter he describes with fine candour and sincerity his first visit to Switzerland in 1872 as a schoolboy of sixteen—the revelation of the Alps from Zimmerwald, the first modest expeditions, and then . . . 'I knew now what I wanted to do—to climb, peak after peak, all the peaks in the Alps, all the mountains in the world. . . . I came down from the Mythen, like Moses from Sinai, bearing the law of my life.' Only the Mythen, and his elders were as unsympathetic as they had been eleven years earlier, but fortune was kinder, and before the holidays were over he had been up the Breithorn and the Dent du Midi.

It was not till 1876 that he had his first regular mountaineering season and came to close quarters with the terrors, as well as the splendours, of the Queen of the Snows. It was a prosperous apprenticeship, rich alike in spiritual experiences and technical lessons. With the following year a new chapter opens. The 'high emotion' of the Engadine has passed; he is the faithful servant of the mountains, but 'no longer stunned by their unapproachable glory.' Naturally he gravitated to Zermatt, which remained for five summers the pivot of his climbing. It was still the Zermatt of Whymper's 'Scrambles'; the Matterhorn (are we really to call it the Cervin in future?) still inspired awe and reverence, and 'if one wanted to know whether a climb had been accomplished, one depended on information obtainable in the Monte Rosa smoking-room. That was the ultimate authority.' And Conway soon discovered that it was 'far from infallible.' He wished to make new expeditions, for new expeditions spelt romance, but to attain that delight it was necessary to find out what had been done already. So, with characteristic energy and directness, he set to work on his own account to extract information from the guides and their

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testimonial books and from the visitors' books in the hotels. Was this the first nail in the coffin of romance? Conway will not have it so, but he admits that 'it is difficult in this stage of a mountain lover's development to keep on sounding the romantic note.' Anyhow, it is all excellent Alpine history, and specially interesting as being the germ of the 'Zermatt Pocket-Book,' a fresh interest which soon became an end in itself, almost more engrossing than the new expeditions. Conway lingers with justifiable satisfaction over the genesis of this tiny volume, the parent of scores of Climbers' Guides and Club-führer. It appeared early in 1881, and two more summers were largely devoted to collecting materials for a second edition.

At this point new doors into the Kingdom of Romance were opened to him to the detriment of his climbing, if not of his love for the mountains. However, in 1886 and 1887 he was back in his old haunts, busy with projected Climbers' Guides. Then, after a long spell of travel in Algeria and the Near East, in 1890 he sought another stimulus. The centre of enterprise had shifted to the Montanvers, and thither Conway betook himself, with designs on the Dent du Géant and the Chamonix Aiguilles. But the weather was unpropitious and his patience gave out. 'It was probably good luck. . . . Had the fates otherwise decreed, I might have been shinning up difficult rocks on obscure mountains from that day to this.' Instead, he found several new variations on the high-level route to Zermatt and made a momentous discovery: 'The combination of mountain climbing with perpetual moving on proved to be the form of mountaineering that gave the richest return. . . . I date my passion for exploring remote mountain ranges from this summer holiday.'

In 1891 he went with A. F. Mummery to the Graians. It was a trial trip which proved that their attitudes towards mountains were fundamentally at variance, and a proposed Himalayan partnership was dissolved 'with mutual respect.' Of the trip we hear nothing, but we owe to it a brilliant character-sketch of Mummery. And so we reach the threshold of the great period (1892–1898) of the journeys to the Karakoram Himalaya, Spitsbergen, the Andes, and Tierra del Fuego. These and the interlude of 'the Alps from End to End,' have been dealt with very fully in six well-known books. The sketches of them which occupy the latter half of the present volume are, very naturally, based on the earlier narratives; it need only be said here that they are executed with skill and a fine sense of proportion, and adequately complete the record of an enviable pilgrimage.

A. L. M.

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PROCEEDINGS OF THE ALPINE CLUB.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, W. 1, on Tuesday, March 2, 1920, at 8.30 P.M., Professor J. Norman Collie, F.R.S., *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, Lieut.-Col. R. B. Bourdillon, M.C., A.F.C., Mr. H. F. Seymour, M.D., M.R.C.S., L.R.C.P., and Mr. Walter Parsons.

The PRESIDENT announced with great regret the deaths of Mr. Alfred G. Topham, Mr. C. E. Groves, Mr. F. A. Wallroth, Mr. A. McAndrew and Mr. Hermann Woolley.

Capt. T. G. LONGSTAFF then read a Paper entitled 'By-Ways in the Hindu Kush,' which was illustrated by lantern slides. A discussion ensued, and the proceedings terminated with a very hearty vote of thanks to Capt. Longstaff.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, W. 1, on Tuesday, April 13, 1920, at 8.30 P.M., Professor J. Norman Collie, F.R.S., *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, The Rev. P. Mordaunt Barnard, B.D., Flight-Lieut. E. B. Beauman, and Mr. H. E. Daunt.

The Hon. Secretary, Mr. J. E. C. EATON, presented the accounts for 1919, the adoption of which was proposed by Mr. A. L. Mumm, seconded by Mr. G. A. Solly, and carried unanimously.

Brigadier-General The Hon. C. G. BRUCE, C.B., C.V.O., then read a paper on 'Kulu and Lahoul,' which was illustrated by lantern slides.

A discussion took place, and Sir Francis Younghusband said that he had visited that country for the first time some years ago and that he had journeyed in the reverse direction to General Bruce, having entered Kulu from the Kangra side. He could confirm all that General Bruce had said with regard to the scenery. It is a most charming valley and one of the few valleys in the Himalayas which are directly governed by the British. General Bruce had told the Members a lot about the gods of that valley and the native superstition with regard to them, and he agreed that it was wise to propitiate those gods with sheep, bullocks, or anything one cared to offer. He had climbed no peaks, but he well remembered going up that valley over the Chundra Pass into Lahoul, and what struck him at that time was the sudden change which one meets there. One leaves a fertile valley for a barren country. The greater part of the hills are absolutely bare, and the change is very striking. Another remarkable thing he had noticed was the extraordinary clearness of the atmosphere on the far side. When he got down to the valley it was a full moon and he was astonished as he looked

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out from his bungalow at the clearness of the atmosphere, which was as clear as any ordinary daylight here in London. He quite realised the difficulties that presented themselves to General Bruce in climbing those peaks, but he was glad that the attention of Members had been drawn to that country, which was easily accessible from Simla, and he was quite sure that any Members who could find their way out there would be well repaid.

Sir MARTIN CONWAY said that the photographs that had been shown were distinctly attractive from the mountaineering point of view, for Himalayan photographs, as a rule, give most people a feeling that it is no good going to those parts if one wants to do any climbing. The photographs shown were those of peaks that could be climbed.

The late Commissioner of Lahoul (Mr. Hughes) gave some interesting anecdotes concerning the natives of the district and their customs and some extraordinary natural phenomena that he had witnessed there. He joined with General Bruce in urging people to go to Kulu for climbing. It has the most glorious scenery that any man ever saw.

The PRESIDENT, proposing a hearty vote of thanks to Brig.-Gen. Bruce for his excellent paper, said it was a country that had been known for a long time, but he thought it was the first time it had been the subject of a lecture at the Alpine Club. As had been pointed out, it was a most interesting country and well worth going to, as the mountains are not too difficult to climb. As to the climbing that had been done in this expedition, he thought it was as fine as any that had been done elsewhere, and it was only those people who had been above 20,000 feet who knew the difficulties of climbing at that altitude, and he thought that Major Todd had done some of the finest rock climbing that had ever been done. He congratulated General Bruce.

The vote of thanks was thereupon carried with acclamation, and the proceedings terminated.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, W. 1, on Tuesday, May 4, 1920, at 8.30 P.M., Professor J. Norman Collie, F.R.S., *President*, in the Chair.

Mr. G. MALLORY read a paper entitled 'A Fortnight in the Mont Blanc District, 1919,' which was illustrated by lantern slides. A discussion took place, and the President proposed a hearty vote of thanks to Mr. Mallory for his excellent paper. This was carried with acclamation.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, W. 1, on Tuesday, June 1, 1920, at 9 P.M., Professor J. Norman Collie, F.R.S., *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, Mr. F. N. Schiller, Mr. F. P. M. Schiller, K.C., and Mr. E. E. Tatham (Member 1897–1914).

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The PRESIDENT announced with great regret the death of Mr. C. Scot Bayley, which took place suddenly on May 11, 1920. He was an Irish Member and was elected in 1889.

Professor C. E. FAY, an Honorary Member of the Club and President of the American Alpine Club, was present, and received a cordial welcome from the President and Members. He expressed his gratification at the warmth of his reception by the delegates of the various Alpine Clubs represented at the Alpine Congress in Monaco.

The following Resolution, proposed by the President and seconded by Capt. J. P. Farrar, D.S.O., was carried with acclamation :—

> 'Resolved that a formal request by the Alpine Club of Canada to be affiliated to the Alpine Club, be cordially acceded to.'

The Regulations with regard to the Winter Dinner, which will take place on Tuesday, December 7, 1920, in the King's Hall of the Holborn Restaurant, were submitted and approved.

The PRESIDENT announced that the Alpine Club of Canada had extended to himself and twenty other members of the Club an invitation to be the Club's guests at its Welcome Home Camp to be held at Mt. Assiniboine from the 20th to the 31st July 1920, while the Camp is in session.

Mr. R. W. LLOYD then read a paper entitled 'Episodes of Two Seasons, 1914–1919,' which was illustrated by lantern slides.

Sir EDWARD DAVIDSON congratulated Mr. Lloyd on the success of his expeditions, and

The PRESIDENT proposed a very hearty vote of thanks to Mr. Lloyd for his interesting paper and the beautiful slides he had shown. This was carried with acclamation.

We learn with much regret that

Mr. EDWARD A. BROOME,
Sometime V.P. of the A.C.,

died at Zermatt early in September. A notice of his Alpine career will appear later.

It is proposed to continue the RECORD OF EXPEDITIONS, and members are requested to send in their lists for the 1920 season—**preferably typed**—to Capt. Farrar, 23 Savile Row, W. 1, not later than the end of January. Forms can be obtained from the Asst. Sec.

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Telephoto A. M. Kellas

MT. EVEREST AND THE RANGE TO THE NORTH

FROM A PEAK (17,400 FEET) TWO MILES N.W. OF THE KANG LA

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THE

ALPINE JOURNAL.

MARCH 1921.

(No. 222.)

A Short Summary of Mountaineering in the Himalaya, with a Note on the Approaches to Everest.

By J. N. COLLIE.

At the present time, when an expedition is being sent to Mt. Everest, it is worth while to give a brief account of what has been accomplished by mountaineers amongst the giant peaks of the Himalaya, a range that stretches from Kafiristan to the western borders of China, nearly 2000 miles in length. Outside the Himalaya and the neighbouring ranges, the highest mountain is Aconcagua, 23,080 ft. In the Himalaya and the neighbouring ranges there are at least eighty peaks above 24,000 ft., seventeen above 26,000 ft., and six above 27,000 ft. At present the record ascent is that of the Duke of the Abruzzi, 24,583 ft. on Bride Peak in the Karakoram range, N. of Kashmir. The earliest account of a high ascent in the Himalaya is that of Captain Gerard, who ascended Leo Porgyul to a height of 19,400 ft. in 1818. He says: 'I have visited thirty-seven places at different times between 14,000 and 19,400 ft.'

Sir Joseph Hooker, during the years 1848–49–50, visited Sikkim; he went to the Donkia Pass, 18,500 ft., and reached 18,590 ft. at Bhomtso. He was particularly fortunate in obtaining leave to enter Eastern Nepal, which since then has been entirely closed to Europeans. On a snow pass beyond Wallanchoon he was nearer to Mt. Everest than any European has ever been, the mountain being about fifty miles away.

From 1854–1857 the brothers Schlagintweit wandered

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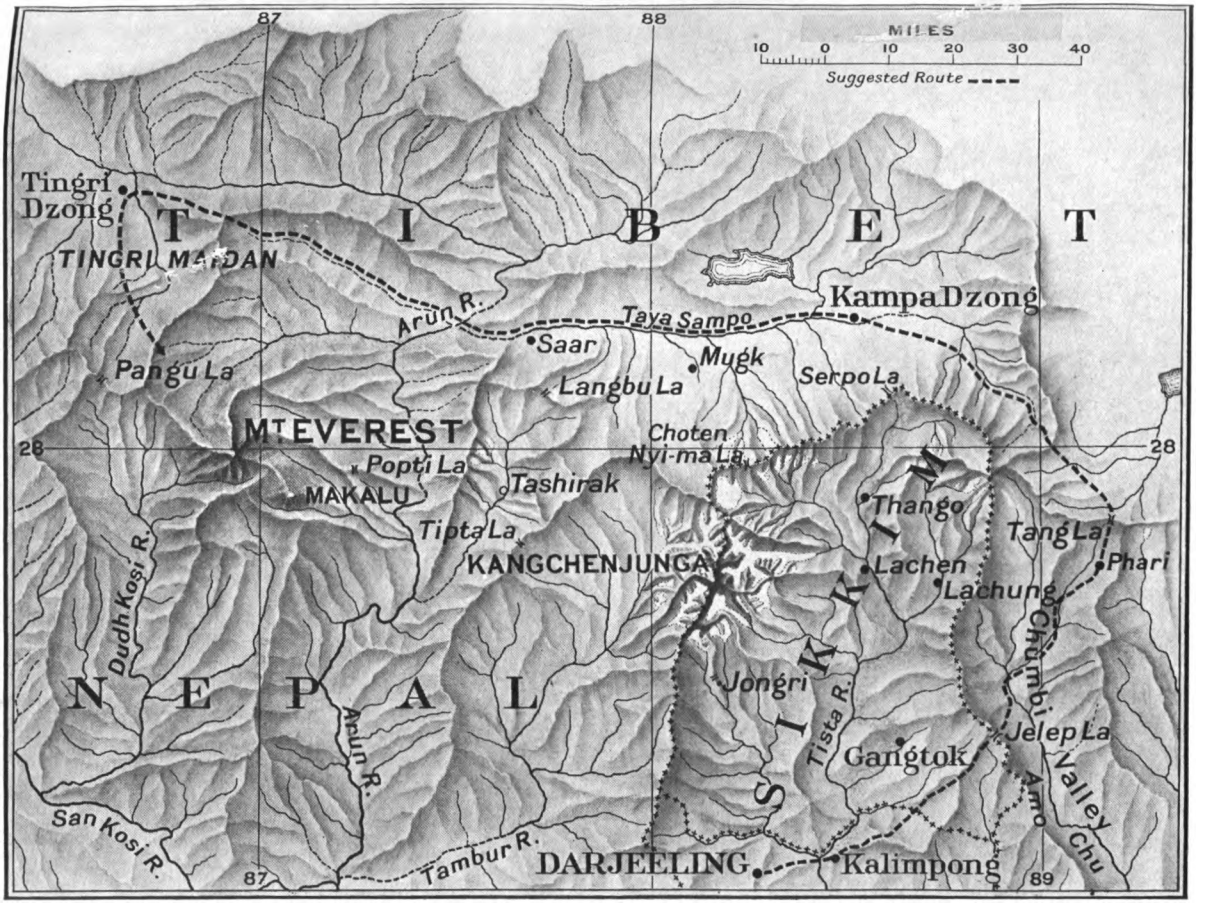
through a large portion of the Himalaya. They were the first Himalayan climbers who had some knowledge of snow and ice, having climbed in the Alps. Their chief ascent was on Ibi Gamin, or Kamet, 25,447 ft., in August 1855. They estimated that they reached 22,259 ft. They made many glacier expeditions, and published many sketches of the high peaks in the Himalaya.

In the years 1860–1865 a most enthusiastic mountaineer appeared, W. H. Johnson, a Government surveyor. One of his masonry survey platforms is said to be visible on the top of a peak (21,500 ft.) near Leh. He penetrated through the ranges, beyond even the Karakoram range, often being over 20,000 ft. At one point he, in order to return southwards, had to cross a range at 22,300 ft. and spent the night at 22,000 ft. The highest peak he climbed was on E61, 23,890 ft., but probably there is some error made in its height. In 1866 he tried to form a Himalayan club, but he received no support. The mountaineering he did was extraordinary for those days ; he was also a marvellous mapper of mountains, but the Indian Government valued his services so low that they reprimanded him for being too zealous in his mountaineering, and he left the Service.

During the next ten or fifteen years but little mountaineering was done in the Himalaya. Captain Montgomerie and H. Godwin Austen pushed glacier exploration further than had been done before. The second highest peak in the world, K2, 28,278 ft., was discovered by Godwin Austen, and he visited the old Mustagh pass. Mr. Pocock (of the G.T.S.) set up a record plane table station, 22,040 ft., on Eastern Ibi Gamin in 1875. Sir Francis Younghusband also crossed a new Mustagh pass on his journey from China to India.

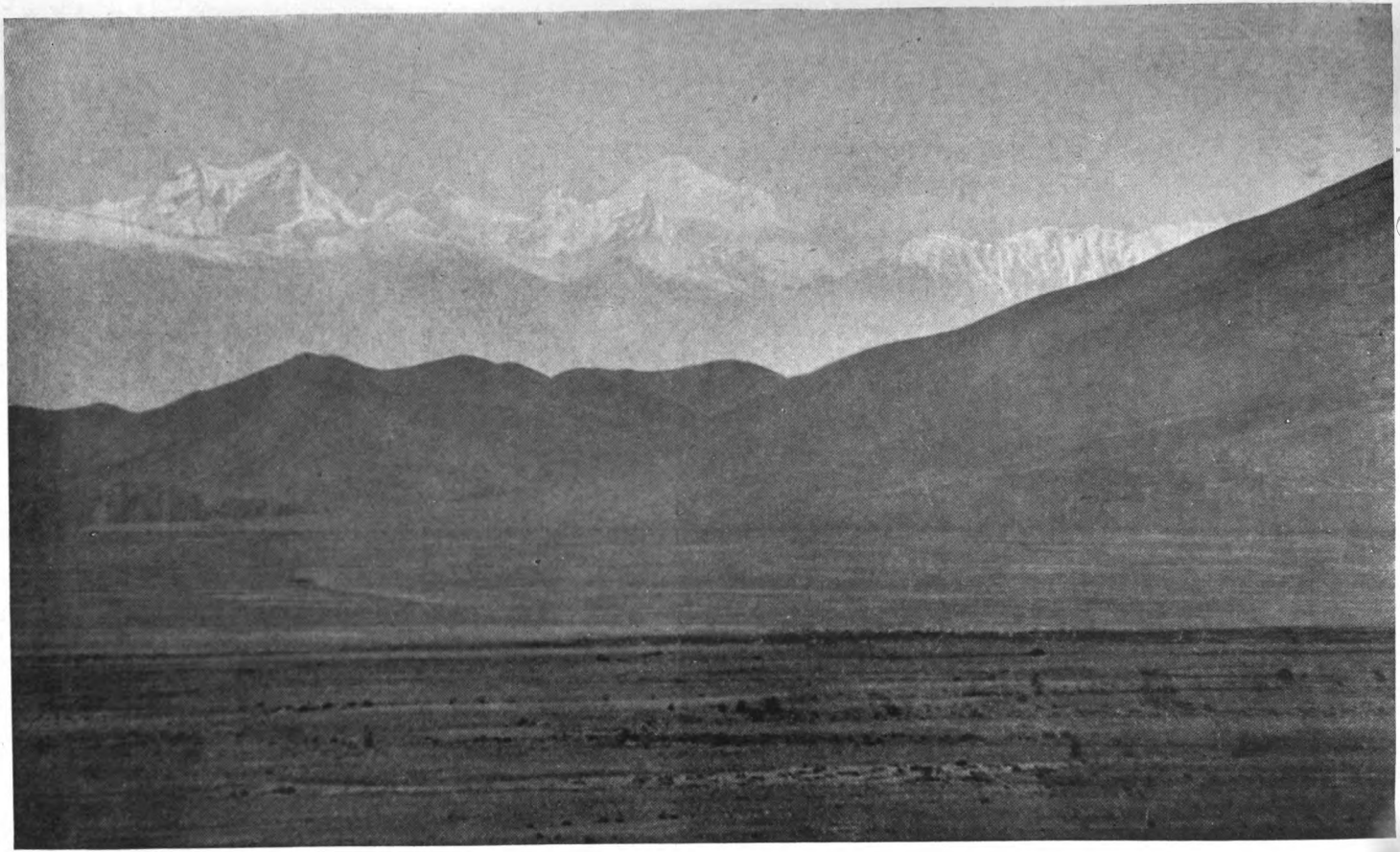
In 1883, W. W. Graham, first with Joseph Imboden, and then, on Imboden's departure, with Emil Boss and Ulrich Kaufmann of Grindelwald, visited Garhwal and Sikkim. In Garhwal he climbed Mt. Monal, 22,516 ft., and on another peak, Dunagiri, reached about the same height. In Sikkim he claimed to have climbed Kabru, 24,015, but it is much more probable that he ascended Forked Peak, which is lower. It was from the summit of this peak he saw two mountains which towered far above on a second and more distant range showing over the slope of Mt. Everest, one rock and the other snow. Boss thought they were higher than Mt. Everest. Most probably he was mistaken, but that there are high

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- - - THE APPROACH TO EVEREST

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MT. EVEREST FROM KAMPA DZONG

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peaks to the N. of Mt. Everest is a fact. Dr. Kellas's photograph taken last December, now reproduced, shows one is a snow peak and one a rock peak.

The next expedition to the Himalaya was Sir Martin Conway's, with C. G. Bruce, to the Karakoram mountains. From Hunza he ascended the Hispar Glacier; he then went down the Biafo Glacier to the foot of the Baltoro Glacier. Ascending this glacier he climbed to the summit of Pioneer Peak, 22,600 ft.

In 1895 A. F. Mummery, C. G. Bruce, G. Hastings and J. N. Collie went to Nanga Parbat, 26,620 ft. Only one determined attack was made on the mountain. Mummery and two Gurkhas, after sleeping at a camp about 18,000 ft., on the next day after very severe climbing reached about 21,000 ft.

In 1899 Dr. Workman and Mrs. F. Bullock Workman visited the Biafo Glacier. In later years they made seven more expeditions, to the Chogo Lungma Glacier, where they climbed a peak 22,567 ft., to the Nun Kun peaks, and to the upper part of the Siachen Glacier that had been discovered by Dr. Longstaff and Lieut. Slingsby. The books they published of their travels contain many interesting photographs, the study of which should be of value to anyone visiting the districts described.

In 1902 Dr. Jacot Guillarmod and Dr. Wessely reached a height of about 22,000 ft. on the N.E. arête of K2 after spending a month and establishing twelve camps on the Baltoro Glacier.

In 1905 Dr. Longstaff, with Alexis and Henri Brocherel, went to Gurla Mandhata, 25,350 ft., where he showed that even under extraordinary conditions climbing can be done at heights well over 20,000 ft. They started up the western ridge of the mountain, and camped at 20,000 ft. Next day they reached about 23,000 ft. on the ridge. In attempting to reach some rocks for a bivouac, they started an avalanche and were swept down 1000 ft. Spending the night on some rocks, they started again next day up a glacier for the top of the mountain, finally digging a hole in the snow, where they spent the third night at 23,000 ft. Next morning they again started for the summit, but two of the party were soon exhausted, a fact not to be wondered at; the third, Henri, however, was not only willing to go on but very much disappointed with the other two members of the party, urging 'You will be very sorry if you turn back now; you will regret it very much when you get down into the valley.'

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In 1907 there were two expeditions to the Himalaya—one to Kanchenjunga, 28,225 ft., by C. W. Rubenson and Monrad Aas, and the other to Garhwal by Dr. Longstaff, C. G. Bruce and A. L. Mumm.

Rubenson's party did not do anything on Kanchenjunga itself, but attacked Kabru, 24,015 ft. In connection with their expedition there are some facts that are of considerable interest connected with climbing in the Himalaya at high altitudes. They camped on the mountains for about twelve days at 20,000 ft. and higher. Their highest camp was 22,600 ft. Their experience of a Himalayan ice-fall is worth recording: it took them five days to cut up it from 19,500 ft. to about 21,000 ft. The cold also was intense, 29° below zero in their tents. They finally ascended the mountain, but did not arrive on the summit, 24,015 ft., until six o'clock in the evening as the sun was setting.

Dr. Longstaff's party attacked Trisul, 23,360 ft. This mountain was successfully ascended by Dr. Longstaff. He camped at 20,050 ft., but was frozen out by cold and wind, and had to return to a lower camp at 17,450 ft. Starting again from this lower camp at 5.30 A.M., he reached the summit at 4 o'clock in the afternoon. He describes the *tourmentes* of wind and snow as paralysing in their intensity.

The next Himalayan expedition was that of the Duke of the Abruzzi in 1909, during June and July, to the Baltoro Glacier. They explored all the glaciers round K2, 28,278 ft., but came to the conclusion that it was impossible to climb the peak. An easier and less lofty mountain at the head of the Baltoro Glacier was selected, Bride Peak, 25,110 ft. Camps were pushed up a difficult ice-fall to the Chogolisa saddle, 20,778 ft., between Bride Peak and the Golden Throne. They spent nine days at this and higher camps in an incessant struggle with the weather, finally reaching an altitude of 24,583 ft. Their final rate of ascent was as follows: from 23,000–23,500 ft., 360 ft. per hour; from 23,500–24,300 ft., 270 ft. per hour; and from 24,300–24,583 ft., 160 ft. per hour. The weather was mild and the snow in a very dangerous condition.

Dr. Longstaff and Lieut. M. Slingsby in 1910 went in search of a long lost pass leading over the Karakoram range from Baltistan to Yarkand. This pass, the Saltoro Pass, Vigne had tried to find in 1835. Sir Francis Younghusband probably was near the N. side of the final pass over the watershed during his journey in 1889. A pass was found at the head of

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the Saltoro River, and crossed, but 'what gave rise to no little surprise' was, they had not crossed the watershed of the Karakoram range but had discovered the largest glacier they had ever seen. Eventually it turned out to be the upper part of the Siachen Glacier that feeds the Nubra River, and certainly one of the largest in the Himalaya. It is surrounded by some very lofty peaks, and is the next great glacier E. of the Baltoro. At its head lies the pass over the watershed to the Yarkand River.

In the meantime Dr. Kellas had visited Kanchenjunga and the mountains that lie to the north of it. In 1911 he climbed Chomiomo, 22,430 ft., Pawhunri, 23,186 ft., and later Kanchenjhau, 22,700 ft., on his fourth visit to Sikkim. He also visited Nanga Parbat, and has been more than once to Kamet, 25,447 ft., where last summer he climbed with Major Morshead to 23,600 ft.

In 1910, 1912, and 1913 Mr. C. F. Meade made expeditions to Kamet, and in 1913 he succeeded in taking coolies and a camp to 23,500 ft. on Kamet. He stayed there the night, and experienced a temperature of −20°F. in his tent. Whilst Meade was on one side of Kamet, Lieut. M. Slingsby was on another; he climbed to 23,350 ft. He does not say how many degrees of cold there were, but remarks: 'That night, ugh! I have never known such cold.'

In 1914 Dr. F. De Filippi explored the eastern end of the Karakoram range. He joined the gravimetric survey of India with that of Russian Turkistan. A glacier of unexpected size and importance, the Remo Glacier, was discovered. It is the source of the Shyok River and also of the Yarkand River.

H. D. Minchinton also in 1914 made an expedition to the Himalaya in Lahoul with some Gurkhas. They climbed several peaks of 19,000 to 20,000 ft.

Dr. Neve of Srinagar has also done much climbing and exploration in Kashmir and the neighbouring ranges, especially in the Nun Kun group.

But of all climbers in the Himalaya none have done so much as General C. G. Bruce. From far Chitral on the W. to Sikkim, 1200 miles away to the E., General Bruce has visited all the more important centres that are open to Europeans. Gilgit, Hunza, Nanga Parbat, K2 and the Baltoro Glacier, Nun Kun, and Kaghan, Chamba, Kulu, Lahoul, Spiti, Garhwal, and Kumaon—in all these districts he has climbed, and his knowledge of the Himalaya is unique.

It will be seen from the foregoing ascents in the Himalaya

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that mountaineering at heights above 20,000 ft. is attended with difficulties that at lower altitudes give far less trouble. The difficulties are twofold, the physical and the physiological. We know more about the first than the second, at least as far as avoiding them; for such physical difficulties as steep rocks, steep ice-slopes, stretches of soft or powdery snow, if they occur to any great extent at high altitudes, would be prohibitive from the point of view of time alone. These we can almost always determine beforehand, by examining photographs. Such peaks as Kanchenjunga, K2, Nanga Parbat, and Nanda Devi, present very great physical difficulties for many thousand feet below their summits. They should certainly for the present be left unattempted by the mountaineer.

But of all the high mountains in the Himalaya Mt. Everest gives most promise of being free from physical difficulties near its summit. Also it is probable that the snowfall on the northern side of Mt. Everest is considerably less than on mountains further S. The monsoon weather that affects the southern faces of the Himalaya hardly comes so far as the country N. of Mt. Everest. For Mt. Everest is sheltered behind the great massif of Kanchenjunga on the S.E., and Makalu and other mountains on the S. Also the snow-line on the N. of the Himalaya is some thousands of feet higher than on the S. side.

It is the physiological difficulties, however, that play far the largest prohibitive part in high ascents. We yet have much to learn about them. The lack of oxygen and the effect of intense cold are the two chief difficulties to be conquered. The lack of oxygen at high altitudes is of course due to the rarefied air. During respiration the body gets its oxygen through the ultimate ramifications of the lungs—the alveoli; and it is through them that the blood becomes oxygenated before it returns to the heart, ultimately to do its work of oxidation of the tissues of the body. Should there be a deficiency of oxygen, the natural processes of the body are at once interfered with. If one takes an engine, and in one hour burns in it a hundredweight of coal, we get a certain amount of energy produced. But if for one hour we cut off the supply of air so that only one-third of the coal is burnt, we naturally only get one-third of the energy.

On the summit of Mr. Everest one is supplied with only one-third of the usual amount of oxygen. The question is, Can the human engine do much work with this limited supply?

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Fortunately the body can acclimatise itself to a considerable extent to changed conditions. For instance, people who ascend Pike's Peak, 14,109 ft., in the United States by railway suffer from faintness, sickness, and blueness of the lips and cheeks, breathlessness and general lassitude. Their blood is unacclimatised to the deficiency of oxygen. Yet on the Pamirs at 15,000 ft. and above, people live their lives comfortably and do hard work; they are acclimatised. The chief effort of the body to counteract the deficiency of oxygen is to increase rapidly the number of blood corpuscles. These corpuscles are the carriers of oxygen from the air to the interior of the body. Double the number of these little carriers in one drop of blood, and that drop will carry twice as much oxygen to the tissues for available energy and life.

The number of such corpuscles in a cubic millimetre of the blood of a person at sea-level is usually less than five million. The average count of a native of the Pamirs is over eight million. On the Pamirs there is only about half as much oxygen in a cubic foot of air as at sea-level. People who make rapid ascents to high altitudes in balloons and aeroplanes are unacclimatised. Tissandier in a balloon ascent fainted at 26,500 ft., and on regaining consciousness found both his companions dead. Yet on the other hand the Duke of the Abruzzi at 24,583 ft., and Rubenson and Monrad Aas at 24,015 ft., were not only capable of living but doing work as well. They were acclimatised by living for some time at the reduced pressure. Another factor that favours the trained mountaineer is that a trained man needs much less oxygen during work than an untrained man. He is an engine working with the maximum economy.

The effects of intense cold on the human system is to lower the vitality, and there is no doubt that the cold at altitudes above 20,000 ft., with a wind, becomes almost paralysing. Longstaff, Meade, Rubenson, all suffered from it. Yet Henri Brocherel after three nights out, the third spent in a hole in the snow at 23,000 ft., was able and anxious to continue climbing. There is little doubt that with acclimatised climbers in first-rate training a greater height will be reached than 25,000 ft. But it only will be done under the most favourable conditions.

Probably the greatest difficulty will be getting the camps up to the high altitudes. The record at present is that of Mr. Meade's coolies, 23,600 ft. on Kamet. Given another 1700 ft., and a camp 4000 ft. from the summit of Mt. Everest

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could be made. If the climbers in this camp were properly warmed and properly fed a push for the summit might be made. Dr. Longstaff 'rushed' Trisul, climbing almost 6000 ft. from his camp, and several other climbers have ascended many thousand feet in one day at very high altitudes. We more or less know that the physical difficulties on the summit of Mt. Everest are not prohibitive, and there is every reason to hope that the physiological ones will also not be great enough to stop a really determined attempt made on the mountain under favourable conditions.

The expedition to Mt. Everest has been made possible by the energy of Sir Francis Younghusband. Early last year he approached the Government in England, and through them the Indian Government, to induce them to ask permission from the Tibetan authorities to enter Tibet. Last summer, however, the Indian Government, owing to political reasons, intimated that for the present at any rate it was unadvisable to move further in the matter. Lt.-Col. Howard-Bury, however, went out to India and was successful in overcoming all difficulties. Just before the New Year a telegram was received saying the Dalai Lama had consented to an expedition entering Tibet to approach Mt. Everest.

The mountain can therefore be arrived at from its northern side, which is in Tibet. The southern slopes of Mt. Everest are in Nepal, a country entirely shut to Europeans.

The route followed by the expedition will be from Darjiling to Phari in the Chumbi valley, from there over a pass in the Himalaya into Tibet, thence to Kampa Dzong. This route has a much better road than the shorter route up the Teesta Valley. From Kampa Dzong to Tingri Dzong, that lies to the N.W. of Mt. Everest, there should be no difficulties. It ought to take not more than seven days. Tingri, and in fact most of the route from Kampa Dzong, lies very high, over 13,000 ft. The means of transport in Tibet is with ponies and yaks. At high altitudes yaks will be the chief means of transport; they are able to live on the very scanty herbage which grows between the stones, are very surefooted, and can be used over the roughest country up to 20,000 ft.

From Tingri the exploration of the valleys approaching Mt. Everest will be made. The chief object of the expedition next summer will be to make a thorough reconnaissance of the mountain, but should opportunity offer an attempt will

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be made to climb as high up Mt. Everest as possible. The difficulties of thoroughly exploring and finding an easy route to the foot of such a giant as Mt. Everest will be great, for there must be several valleys coming down from the mountain in which probably will be long glaciers. It will take much time getting up to the head of these glaciers, and still longer to get from one valley into the next, as the ridges separating the valleys will almost certainly be far too high to admit of any camp being taken across them. Also probably the heads of the glaciers on the N. side of Mt. Everest will be at least 20,000 ft. This will be an advantage from the point of view of climbing Mt. Everest. If there are no steep glaciers and ice-falls between 20,000 ft. and 24,000 ft., the access to the upper snow-fields on the mountain will be not too difficult for the coolies. One must not forget Rubenson's experience on Kabru, when he took five days to cut up less than 2000 ft. of glacier. However, it is to be hoped that on the northern slopes of Mt. Everest the glaciers will be easier to climb. There is no doubt that the northern slopes of the Himalaya, on Pawhunri and Chomiomo, for instance, are far easier than the southern slopes, and the snow-line also is much higher.

General Bruce's paper on Mt. Everest in the *Geog. Journal*, January 1921, and Lt.-Col. Howard-Bury's 'Some Observations on the Approaches to Mount Everest,' in the *Geog. Journal*, February 1921, contain much valuable information.

The Ranges North of Mt. Everest as seen from near the Kang La.

By J. N. COLLIE.

ON February 5 I received a letter from Dr. Kellas, who is at Darjiling, in which he sent a tele-photograph (frontispiece), of much interest at the present time. Both Makalu and Everest are shown, but what is of exceptional importance is that the ranges to the N. of Everest have been photographed for the first time. It is taken from a peak 17,400 ft. N.W. of the Kang La.

After leaving the Kamet district he went to Darjiling, in Sikkim. At the end of November he started along the water-

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shed between Sikkim and Nepal for the south-western spurs of Kanchenjunga, finally arriving at the Kang La. Again to quote :

> ' When we left Ghum in the end of November, we were during the day nearly continuously in mist, but on reaching the Nepal frontier ridge, we found that we were above the mists, and in nearly continuous sunshine during the day. This state of things continued during the month, and we reached the Kang La without fresh snow falling. At present I will merely send you two rough tele-photographs. I think you will agree that the rock peak and the snow peak dominating the further range are clearly in evidence, and explain Graham's statement regarding his conversation with his guide on the top of Forked Peak.[1]
>
> ' Not only are Graham's peaks shown, but there are at least two others unsurveyed above 24,000 ft., namely, the rock tooth to the N. of Makalu, and a splendid rock and snow peak N.W. of Graham's snow peak, which is probably higher than any of these unsurveyed mountains. I will say more about these in my next letter.'

The above remarks of Dr. Kellas regarding Graham's statement, made nearly forty years ago, seem to be well grounded. Graham in his paper (' A.J.' vol. xii. p. 49), says :

> ' North-west, less than seventy miles, lay Mt. Everest, and I pointed it out to Boss, who had never seen it, as the highest mountain in the world. " That cannot be," he replied, " those are higher "—pointing to two peaks which towered far above on a second and more distant range and showed over the slope of Everest, at a rough guess some 80–100 miles further north. I was astonished, but we were all agreed that, in our judgment, the unknown peaks, one rock and one snow, were loftier. It has been suggested to me since that we mistook Mt. Everest, but this is impossible.'

That Graham was well acquainted with the form and appearance of Mt. Everest is evidenced by the fact that he has correctly identified Everest in a drawing by Col. Tanner (*cp.* ' A.J.' vol. xii. p. 490).

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[1] The peak to the S. of Kabru that Graham most probably ascended.

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Moreover, there is further evidence than Graham's of high peaks to the N. of Everest. Pundit No. 9 and Babu 'S.C.D,' who travelled through the country, say that it contains mountains of enormous height. There are also persistent native beliefs in the existence of rivals to Everest in the country N. of it.

It is also worthy of mention that Mr. Freshfield in his book, *Round Kangchenjunga*, p. 204, writes: 'The Kang La Peak is only a week's travel from Darjiling. Will not the Surveyor-General send up an officer who can climb and is competent to settle the question at issue?' The question at issue being the existence of the two mountains mentioned by Graham. That was twenty-one years ago. Dr. Kellas has been there and has obtained tele-photographs of very high peaks, just where Graham said they were. That they are higher than Everest is exceedingly doubtful, still the proof of their existence adds considerable interest to the expedition that next summer will be passing quite close to them.

One more word about Dr. Kellas's dash into the Himalaya, practically in December. He is to be heartily congratulated on the result, and admired for the pluck in undertaking a journey at such a time of year. One only wonders, for he says nothing about it, what were the temperatures he had to endure, at that season of the year, at altitudes sometimes higher than the summit of Mt. Blanc.

Himalayan Hints for Mountaineers.

By C. F. MEADE.

[The following notes, though based merely on an experience of British Garhwal where I spent three seasons, may, I hope, be to some extent useful for climbers in other districts of the Himalaya.]

Personnel.—In my last attempt on Kamet my party consisted of two Europeans, namely, my Alpine guide Pierre Blanc and myself. I am aware of the drawbacks of so small a European party, but when all goes well everything is much easier. In case of illness or accident it would be otherwise. Blanc is one of the few professionals ideally suitable for a Himalayan expedition, and he has been out three times, but I do not know whether he wants to go out again. If a guide be taken (and on Kamet a first-class step-cutter

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may be essential) the question of his selection is of extreme importance. A guide in the Himalaya must combine the rare qualities of the cream of the first-rate professionals with all those advantages which an Englishman usually possesses in dealing with natives.

For high altitude transport the tribe of nomads who inhabit British Garhwal and are known as Bhotias are excellent. Once their confidence has been gained I cannot imagine better men for the job. Kumaunis and even Garhwalis (with exceptions) do not seem to compare with them. It is better to be accused of spoiling the men than to fail in supplying them with warm clothing and equipment on a very generous scale. Boots should be included. The Bhotias took kindly to them at once. The men should be made to understand clearly that the kit is only to be theirs as long as they remain in the employ of the expedition and continue to give complete satisfaction. It may be explained to them that only those whose service has been entirely satisfactory will be allowed to retain their kits on the termination of the engagement. As to spoiling the coolies it is worth remarking that the present of a pair of boots alone, apart from clothing, is probably the equivalent of a month's pay. At the same time they naturally will not accept boots in lieu of pay. In deciding the question of pay it is well to remember that the Bhotias are not mere baggage coolies, but can be relied upon to do all and much more than the work of Alpine porters. They are brilliant crag-climbers without any knowledge of snowcraft. Under an admirable trainer like Blanc they soon become efficient mountaineers. I employed about a score, of whom seven accompanied us to our 23,000 ft. camp.

As to the ideal trainer he should not only have 'personality,' but should equal the Bhotias in rock climbing, and only the best performers can reach this standard.

For the journey from railhead two chuprassis are taken to organise the necessary relays of coolies, but these chuprassis should not be retained after the base of operations is reached as they are useless at great altitudes. It is best to give the Bhotias their own head man, who will be absolved from carrying a load.

The choice of agents at or near railhead is important, as it may be necessary for the agents to forward additional supplies after the expedition has started, if the villages on the line of march are likely to be short of labour and unable to furnish sufficient coolies for the whole of the bandobast. Any such

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arrangement would have to be very carefully planned out in detail beforehand.

As to cooks, I preferred to teach two Bhotias from the party whom we sent for to meet us near railhead. They cooked under our supervision. The Indian cook probably, or the Indian job cook certainly, is capable of accounting for the bad health of an entire party for a whole climbing season, for although he is skilful he will not learn hygiene and should not be trusted.

As bearers we employed two Bhotias. Indian job servants from the plains have a bad reputation and are a mischievous disruptive force in an exploring expedition.

For similar reasons, in spite of the obvious advantages of an interpreter, I preferred not to engage one, but to trust to luck and a smattering of Hindustani. The late Pundit Bidya Datt Dimri of Badrinath was most helpful when we were in his neighbourhood. A hired interpreter is too likely to be a rascal with a strong distaste for exploration, and his presence may have a devastating effect.

Material.—I had all my stores packed by the London 'Army and Navy Co-operative Society' in Venesta cases screwed down and fitted with padlocks. Half a dozen master keys were supplied. The padlocks should be packed together and only fixed on arrival at the Hill station, otherwise they are liable to be damaged in transit. Each of the victual cases held food for the two Europeans for five days. The provisions were weighed and sampled at home, and no load (except the tents) exceeded 40 lb. Light loads mean that coolies arrive punctually in camp. Moreover, the Government load is only 40 lb.

Whymper tents were used. They deserve their high reputation. An outer fly is, in my opinion, essential at high altitudes or the tent becomes uninhabitable when the sun shines. The arrangement for the outer fly requires altering. The tent poles require lengthening, and shoulders should be cut in them close to the top in order that the tips of the poles may project through strong eyelet holes made in the fly which should rest on the shoulders. If this modification is not made, the outer fly soon tears to pieces by fraying on the tips of the poles. To provide a sufficient air space as protection against sun the prolongation of pole and shoulder above the ridge line should provide a distance of at least six inches between the outer fly and the ridge line.

An 80 lb. Kabul tent is useful for the Bhotias at low elevations. The party who reach the very great altitudes

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should all sleep in Whymper tents with outer flies and ground sheets sewn in. Even so, the sun is fearfully oppressive, and if I returned to the Himalaya I should try darkened material for the high altitude tents.

A good medicine chest is useful, as many natives will come to be treated if they receive any encouragement.

Several dozen articles of more or less value can be taken as presents for natives of various degrees of importance.

A few features of personal kit may be of interest. I took elaborate precautions against frost-bite. One of the most useful was a pair of cloth bags or toe-caps to slip on over the toes of the boots. They were held on by tapes passed behind the ankles and tied in front. The cloth was sufficiently weak to allow the boot nails to bite through it into snow, ice, or rock. This contrivance when worn out could be thrown away and spares could be carried.

Lifebuoy air cushions were invaluable for resting the hip, for we always slept on the ground.

At great heights we used big eider-down sleeping-bags in balloon silk outer bags and wore all the clothes that we had. A hot-water bottle was most useful at the highest camps, and Primus cooking stoves were always used there. It is most desirable to try special fuels or modifications of the Primus itself in order to make it effective in rarefied air, for under these peculiar conditions the Primus is a constant nuisance.

Helmets should give very thorough protection against sun, likewise should snow spectacles. The helmets should have good pugarees as additional protection, and strong chin straps.

Sun umbrellas were most useful at great heights also on the return journey in the rains. They should either be specially strong to be used as walking-sticks or have a fitting for a strap to carry them slung across the shoulder. I believe that by their use mountain sickness would be greatly mitigated.

In the low villages we marched in shorts and shirt sleeves. Stocking tops can be turned up over shorts to keep off biting flies, or the kind of shorts used in the war in the East may be worn. During the rains we carried featherweight oil-silk waterproof capes. These were fixed by tabs to buttons sewn on the back of the braces, and thus could be flung back, so that whenever the sun came out the encumbrance was imperceptible. Pith helmets require waterproof covers of oil-silk which can be put on whenever it rains.

In 1910 we carried a somewhat primitive apparatus containing oxygen cartridges which could be inhaled merely

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through a tube without a mask. Our experience of it led to no conclusion.

The high-altitude coolies should have kit on a very generous scale, as the success of the expedition depends on their being well housed, fed and clad. Their clothing at great altitudes ought to be as warm and light as that of the Europeans and they should have good warm sleeping-bags. They soon accustom themselves to boots. Their kit must include snow spectacles, and I believe that shady hats or helmets with pugarees would keep them stronger and more efficient. A specially big size of rucksack is useful for these permanent coolies when carrying at great altitudes. I think that they should also be given a Primus stove and be taught how to use it.

Organisation.—A golden rule is to dispense with headmen, cooks, bearers, and interpreters. Our cooks were Bhotias who cooked humbly and honestly under supervision, while we frequented the cook-house as a smoking-room. Thus we escaped the poisonous activities of an Indian professional cook. Our headman was one of the Bhotias. Many trials had proved him to be pre-eminent among his fellows. As for bearers, the two Bhotias very soon learnt the simple duties required in camp, and enjoyed their jobs which entitled them to carry half loads. They never gave trouble. Indeed, I have never known a troublesome Bhotia.

Three other Bhotias marched with us always and carried half loads. One carried a light picnic meal and hot tea in a Thermos for consumption on the march. Sweaters and feather-weight mackintoshes were included in his load. The other two (the cooks) carried a light awning and materials for cooking an emergency meal on arriving at the new encamping ground pending the arrival of the coolies.

A good plan in organising the daily marches on the way up-country is to have a quantity of counters, one for each coolie load, stamped with a number corresponding to a number painted on the load. The coolies are formed into a queue at the beginning of each march and a load with its corresponding counter handed to each man as he comes up to the pile in his turn. At the end of a march the coolies have to present their counters before receiving their pay. This device will frustrate any false claim on the part of a coolie who may have shirked carrying his load. It also facilitates the prompt payment of the coolies in small groups as fast as they reach camp. Nothing is more discouraging to a punctual coolie than having to wait

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hours for the arrival of dilatory companions before he can get away home with his pay. A hole with a string through it in each counter enables the coolies to carry their counters without losing them. For any loads, such as tents, which may be over 40 lb. coloured counters may be used and a fraction over the usual tiny backsheesh allowed.

As the loads are generally piled in stacks it pays to paint the numbers on each case in very large figures on each of the six faces. Various contents may be indicated by painting the cases various colours, for instance—red for petrol and money, yellow for victuals, blue for altitude kit, and so on. It is wise to distribute the cash among several loads. An index in duplicate can be kept of all loads with their numbers and contents.

A party of Bhotias came down to meet us at the Hill station that we started from. The party included the headman and the two cooks. The two bearers and the tiffin coolie were also chosen from it.

One secret of success will surely be in paying the greatest attention to the comfort of all the party, native as well as European. It is false economy to stint any of those engaged in work at great heights. As stated, I believe that the Bhotias (or permanent coolies) should have a first-rate outfit, including even a Primus cooking stove for use at high camps. It would be a good plan to think out a selection of light wholesome foods for the coolies to cook and eat at high altitudes, not forgetting the restrictions of caste. In the case of the Bhotias at high camps the restrictions become more elastic. When mountain sickness is feared the men may justifiably be exhorted to take certain European delicacies (never beef) in the guise of 'dawa' (medicine). At great heights the more substantial kinds of meat seem to be just as bad for Bhotias as for Europeans. The Bhotia habit of taking a nap in the sun must be firmly checked, as it is frequently a cause of mountain sickness.

Health.—I consider that the sun's rays passing through rarefied air have a peculiar potency and are a factor of extreme importance hitherto underestimated in causing mountain sickness. Umbrellas, pugarees, extra dark spectacles, darkened tent canvas, and other precautions should be taken. It is well to avoid marching in the heat of the day whenever possible, and especially when at great heights. I think that at heights above fifteen or sixteen thousand feet exposure to the sun affects the digestive organs and that a consequent need for aperients may become very urgent and chronic. There is

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perhaps a tendency to make light of mountain sickness *after it is over.* It is surely fair to combat this tendency, if only for the sake of others who may undertake similar expeditions.

Unfortunately the appalling cold at great altitudes before dawn is a formidable drawback to marching at that hour. At 20,000 ft. I have known the temperature *inside* a small tightly closed Whymper tent, in which three men had cooked and slept, to drop to 20 degrees below zero Fahrenheit before dawn. The danger of frost-bite in the high Himalaya seems greater than the risk run in the lower ranges like the Alps, where the climber's power of resistance is stronger. In spite of this I think that the power of the sun is a more likely cause of failure than the cold.

In the inhabited valleys we only drank boiled water, usually in the form of weak tea, and we carried biscuits in order to avoid eating the local chupatti, which is made from flour that often contains fragments of grindstone and other foreign matter. At any wayside dak bungalow met with, it is prudent to inspect food before eating it. Special precautions should be taken against the risk of chills. With such reservations and with the exception of the cholera-stricken pilgrim routes on the Ganges (and these might be avoided) we found the hill climate a good one; that is, after we had foresworn the Indian professional cook and all his works. As far as fever is concerned, I think it more likely to be contracted from mosquitoes when the train halts at stations in the Terai. We were not troubled by it in the hills.

Difficulties.—If at great altitudes step-cutting in ice becomes necessary, or if the party have to wade through powdery snow, the consequent exhaustion of the climbers is likely to make a big ascent impossible. During three seasons I have invariably encountered powdery snow when above 20,000 ft., but I have had no experience of autumnal conditions. I doubt whether the cold high up is any worse in early autumn. Snow-shoes and even the smallest skis would seem to be too unwieldy for use at the great heights, and if powdery snow be met with, success would probably be impossible.

In the Alps a slope or couloir is generally less steep actually than a distant view of it would imply. In the Himalaya the converse seems to be the rule. The greater scale in the Himalaya results in greater complexity of detail; the topography is consequently more intricate; not only are distances at first more difficult to judge, but the features of the landscape are more deceptive. I believe too that apart from their

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greater scale the Himalayan peaks are more formidable than the Alpine summits. They strike me as steeper, and I suggest that, with greater extremes of heat and cold than in Europe, their rocks may disintegrate more rapidly and ice may cling to slopes at steeper angles. Cornices as well as avalanches of all kinds are commoner and more extensive.

Dr. Kellas' Expedition to Kamet in 1920.

DR. KELLAS, who has remained in India with the intention of making another attempt on Kamet next summer, but has now agreed to join the Everest expedition, has sent a copy of the report he has made to the Oxygen Research Committee; and in view of its immediate importance to the Mount Everest expedition, we assume his permission to print the following extracts from it:

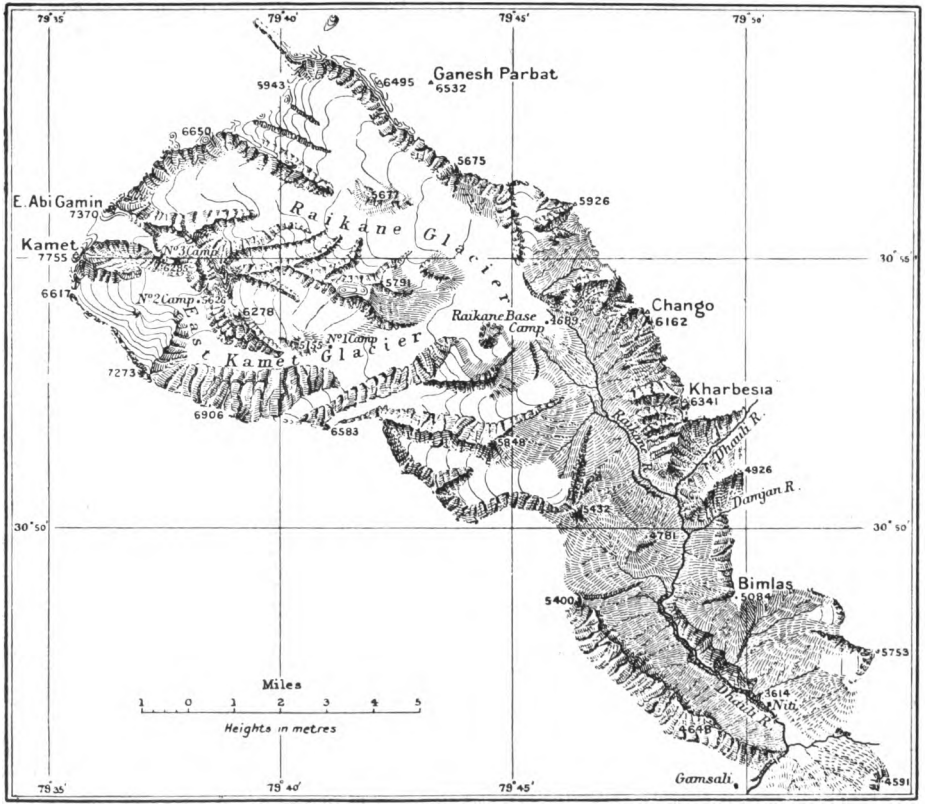
'At the end of the first week in August part of the expedition started from Kathgodam, and on August 19 joined Major Morshead at Chomoli, about 150 miles to the N. The permanent members of the expedition included Major Morshead and his transport officer, with eleven attendants—the latter being intended chiefly for survey work, and also for transport at high altitudes—and myself with two servants. There were about eighty-three coolie loads.

'From Joshimath, 29 miles N. of Chomoli, transport work was difficult, and repeated unavoidable delays occurred. Four bridges had been washed away in the Niti Valley by floods, but the Deputy Commissioner of Garhwal, Mr. P. Mason, made such arrangements that we had only to build one bridge over the river Dhauli.

'On August 29 we started from Niti, the highest village on the route (12,000 feet approx.), with about twenty-one yaks and forty coolies (each yak carrying two coolie loads), and on August 31 reached a base camp at the end of the Raikana Glacier at an altitude of 15,380 feet.

'Above this point the route was very rough, and all baggage had to be carried by coolies. Carriage of wood, which could be obtained about a mile below the camp, became of special importance. Even at this base camp want of acclimatisation to altitude began to be evident in certain cases, and incidence of malaria was also troublesome.

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KAMET

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'On September 3 an advance was made along the east Kamet Glacier—which was found to be quite incorrectly given on the map—and a camp formed at about 16,800 feet. This camp was on fine sandy detritus on a bank above the glacier, and was generally regarded by the coolies as the last comfortable camp. A delay occurred here due to difficulties in connection with transport of wood, and it was September 8 before Camp No. 3 was formed at 18,500 feet on rough glacial detritus above ice. This third camp was near the base of Kamet, which rose in a series of rock precipices to the N.W., forming a comparatively sharp peak. Between this peak and the ridge of east Ibi Gamin (24,170 feet), to the N.E. there was a snowy saddle of altitude about 23,500 feet, which obviously indicated the route to the summit. The increase of height between this third camp and the saddle—namely, 5000 feet—consisted firstly of 2500 feet of sharp ascent, chiefly steep scree, but partly débris-covered glacier, then came 1000 feet of precipitous rock, and finally about 1700 feet of snow and ice. From the configuration of the mountain it seemed likely that the tops of these three " pitches " would necessarily represent positions for Camps 4, 5, and 6. At this third camp my chief servant became so incapacitated—he had been accidentally benighted on the glacier along with Major Morshead's servant—that he had to be sent back to Niti.

'On September 11 we moved up to a camp above the screes—Camp No. 4—our tents being pitched at 21,000 feet (approx.). Here the transport was unsatisfactory, and we were detained about a week. At this camp it became evident that our remaining servants would be unable to go higher. Both seemed to have reached the limit of their acclimatisation powers, in spite of being adequately protected, and suffered from the cold—approx. 0° Fahr. during the night—while my servant again had attacks of malaria.

'On September 19 we climbed the rocks, and formed a camp on snow at approximately 22,000 feet. After a day at this camp to allow acclimatisation to take place, we ascended to a little above the saddle along with three coolies from the village of Mana, starting at 9 A.M. and reaching the saddle at 3 o'clock. At 3.30 we had attained about 23,600 feet, our maximum altitude, but the coolies declined to attempt Ibi Gamin (24,170 feet), which seemed feasible, or to ascend further on Kamet. Starting back at 3.45 P.M. (approx.) we descended rapidly, and reached our 22,000-feet camp

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about 5 P.M. The wind was cold, and the three coolies with us suffered more than Major Morshead or myself, and complained of headache. A considerable amount of step-cutting was necessary, which was shared.

'Next morning Major Morshead unfortunately had to descend, as his period of leave had expired, taking all the coolies with him. The coolies refused to entertain the idea of moving a camp up to the saddle, alleging that the winter storm was due, and that we would be snowed up. The threatened incidence of this winter storm had been their continual complaint since reaching Camp No. 3, but otherwise the men from Mana village (10,000 feet), some of whom were coolies who had been with me previously in 1911 and 1914, behaved very well, and indeed were the mainstay of all the hard work carried out. On three occasions at Camp No. 4 we had about a couple of inches of fresh snow, the bulk of which quickly evaporated.

'At the base camp I tried to get coolies to come and pitch a camp on a pass between the Raikana Glacier and the Ganeshganga Valley to the N., from which one could carry out experiments with the oxygen cylinders, and Professor Hill's rubber bag on a beautiful snow-peak 21,700 feet high, which evidently could be climbed. Even a heavy snowstorm could have been weathered in such a position, but the coolies refused to obey the transport officer, and would not even transport wood a distance of 3 miles to a base camp below the Ganeshganga Peak mentioned. In addition to this, when on two consecutive days the yakmen had driven off their yaks unloaded, and men had to be sent after them to bring them back, it was evident a retreat was necessary.

'We therefore made a double march to Niti on October 1, and on the following day reached Malari, a large village about 10 miles to the S. I had not agreed to the retreat from the Raikana Glacier until the transport officer had promised to try and make an arrangement at Malari to visit the Bagini Glacier to the S.E., and form a high camp on a suitable mountain for carrying out experiments, and I had fixed upon Dunagiri Peak (23,184 feet), the finest mountain of that region, for the purpose.

'On October 3 we moved S. from Malari, and on the 5th reached Dunagiri village (11,150 feet), about three days' march from the mountain of the same name. It soon became evident, however, that the Dunagiri men were somewhat

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inefficient coolies and knew nothing of snow work, so that the idea of forming a camp at 20,500 feet on Dunagiri was abandoned, and a camp formed at 18,000 feet on a more accessible mountain about 21,000 feet high to the N.W. of the Bagini Glacier.

'About a week's work was carried out at this high camp, and Dunagiri was regained on October 16. From there continuous travel *viâ* Joshimath, Karuprayag, and Ranikhet brought us to Kathgodam on the 5th, and thence to near Darjeeling on November 9, after an absence of four and a half months.

'OBSERVATIONS ON MOUNTAIN SICKNESS.

'Contrary to the author's observations in previous expeditions, mountain sickness, in one form or another, was not uncommon. Two reasons explain the difference. In the first place, in previous expeditions picked hillmen were employed, whereas in this case several men from near the plains were present; and in the second place, most of the coolies in preceding expeditions were Buddhists, who can vary their diet, whereas on this occasion the men were Hindoos, and handicapped by a comparatively rigid diet which in some respects is unsuitable for high altitudes, unless under special conditions, difficult to arrange for. As it is extremely difficult to cook the nitrogenous vegetable foodstuffs above 16,000 feet, fresh mutton should be supplied.

'ACCLIMATISATION TO HIGH ALTITUDES.

'Satisfactory acclimatisation to the maximum altitude reached was attained by only two members of the expedition, namely, Major Morshead and myself. This is probably in some measure well shown by pulse and respiration rates, which were always taken at rest while sitting.

'The time spent at the highest camp (22,000 feet), however, two and three nights respectively, was insufficient to arrive at definite conclusions as to the completeness of our adaptation to that altitude. In connection with the projected ascent of Mount Everest (29,141 feet), it is obvious also that capacity for acclimatisation should be tested at higher altitudes, and next year the author hopes that it may be possible to camp for a week just below the Kamet saddle, at an elevation of about 23,400 feet.

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'A few cases of Cheyne-Stokes breathing were observed, although as a rule at least twenty-four hours were allowed for acclimatisation to take place before making observations.

'SUITABLE DIET FOR HIGH ALTITUDES.

'In previous expeditions it had been observed that a depreciation of appetite seemed to occur after residence for some time above 20,000 feet. As it was possible that this might have been due to the diet, which had consisted entirely of tinned foods, chiefly cold because of difficulties regarding fuel transport, an attempt was made on this occasion to get an approximation to the diet usually taken at sea-level as already mentioned. Fresh mutton and vegetables were used at the higher camps, and the food varied as much as possible. The effect was distinctly good, and no diminution of appetite was observed, even at the 22,000-feet camp; but, as already indicated, the time spent there was too short to form a definite opinion as regards completeness of acclimatisation.

'During the ascent to the saddle our appetites seemed good, but we had little time for halts, because of the amount of step-cutting necessary, and there was also a very cold wind. As liquid refreshment, we had a large Thermos flask filled with hot bovril.

'RATE OF ASCENT.

'The times of holding the breath, and the alveolar oxygen pressures at different altitudes, are obviously connected with the possible rates of climbing, and it could be shown that, assuming 1000 feet change of altitude per hour on easy ground to be an average rate of ascent at the summit of Mont Blanc (15,780 feet), the rate at 23,000 feet would be about 600 feet per hour. On this occasion, excluding halts, our speed was only a little above half that value, viz. 320 feet per hour, but, considering the amount of step-cutting necessary, this was about what would have been expected. On previous expeditions the author has found that his rate of ascent on easy snow at 23,000 feet approximated to 600 feet per hour, agreeing with Longstaff's experience on Trisul. On such a basis, the calculated rate of ascent for the last 1000 feet of Mount Everest would be between 250 and 350 feet per hour. Possible

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rates of ascent may be further tested and elaborated in next year's report.

'VARIATION OF MINIMUM TEMPERATURE WITH ALTITUDE.

'Raikana Glacier.

Base Camp No. 1..	15,380 feet	31–8–20	Min. 30° Fahr.	
2nd Camp	16,800 „	4–9–20	„ 23°	„
3rd „	18,500 „	9–9–20	„ 15°	„
4th „	21,000 „	12–9–20	„ 4°	„
5th „	22,000 „	19–0–20	„ −15°	„ .'

The following extracts from the report of Major H. T. Morshead, D.S.O., R.E., are given by the courtesy of the R.G.S., in whose March Journal the full report will be found:

'The foot of the Raikana Glacier was reached on September 1. Dwarf juniper scrub (*bhitaru*) grows plentifully in this neighbourhood and forms an excellent fuel, which can be pulled up by hand by the roots without the use of an axe, and burns with a pleasant aromatic odour. Above this point no further fuel occurs, nor is the valley passable for yaks. . . .

'From the Raikana base camp our route was identical with that of C. F. Meade in 1913, and led over the moraines and crevasses of the east Kamet Glacier for a distance of 10 miles. Frequent and terrific avalanches from the steep southern and western faces of the valley are a feature of this portion of the route, and form a danger to incautious travellers; safe camping sites may be found, however, here and there on the opposite side of the valley. We were fortunate in having with us some of Meade's old coolies, whose knowledge of previous camping-grounds proved invaluable, and I am glad to take this opportunity of acknowledging our indebtedness to his gallant pioneering. Profiting, however, by Meade's experiences of mountain sickness after a series of long and rapid marches, we decided on adopting a programme of short and easy stages with frequent days of halting for acclimatisation, which latter incidentally enabled the coolies to return for further supplies of much-needed fuel and provisions. . . .

'It may be profitable to discuss briefly the reasons of our failure to reach the summit of the mountain. Undoubtedly the first and foremost cause was the lateness in the year. . . .

'A second cause lay in the failure of the Survey khalasis, recruited from the middle Himalayas, to stand the climate

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and altitude of the higher ranges. I had enlisted a dozen strong Garhwali khalasis . . . who had been lavishly equipped with warm clothing on the arctic scale. Unfortunately, one half of their number succumbed to mountain sickness at 15,000 feet, while the other half proved so extravagant of our precious firewood that they had to be sent back to the base camp, and their places taken by the hardier Bhotia men of Niti and the neighbouring villages. The provision of boots and warm clothing for the latter on the spur of the moment was however a matter of difficulty and proved a direct contributory cause of our failure.

'A third cause of failure must be traced to the inadequacy of our arrangements for cooking at the higher altitudes. I was unaware until too late that the large Primus stove, on which I had been relying, would not work in the rarefied atmosphere of 20,000 feet, beyond which point methylated spirit is the only possible fuel: while Dr. Kellas had only one small spirit stove which took an hour to thaw sufficient snow to fill a teapot. Had our equipment included a dozen large spirit stoves and two or three two-gallon petrol-cans full of methylated spirit, both our own and the coolies' cooking would have been assured.

'I have nothing but praise for the Bhotia coolies of the higher Himalaya. On rock they can climb like goats, while on ice they readily learn step-cutting. . . .

'The oxygen apparatus forms the subject of a separate detailed report by Dr. Kellas. Neither of us felt the slightest need for artificial stimulants in the form either of oxygen or alcohol up to the highest point reached, and my impression is that one could have gone several thousand feet higher without distress of breathing, had other conditions admitted. . . .

'It only remains to express my gratitude at being privileged to serve my apprenticeship in mountaineering under so experienced a hand as Dr. Kellas. Failure is often more instructive than success, and I can only hope that this expedition, on which I shall always look back with feelings of pleasure, may be the prelude to other more successful future efforts in the same genial company.'

Major Morshead, D.S.O., R.E., is, we understand, a nephew of Mr. F. Morshead the famous old member of the Club.

Major Morshead served in the war as C.R.E. of the 46th North Midland Territorial Division, whose final exploit was to capture, on September 29, 1918, the Bellenglise position of the Hindenburg line. He got his D.S.O. in 1917.

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Mr. C. F. Meade writes:

'The accounts by Dr. Kellas and Major Morshead are extraordinarily interesting. I am inclined to revise my conclusions and believe I was wrong in rejecting the possibility of acclimatisation at heights of 20,000 feet and over.

'Given perfect snow conditions and easy climbing, it certainly looks as if mountaineers of such exceptional adaptability to altitude as Kellas and Morshead might conquer Everest without much suffering.'

Early Exploration of the Rocky Mountains.

By J. NORMAN COLLIE.

The Club has lately acquired a rare blue-book entitled 'Papers relative to the Exploration, by Captain Palliser, of that portion of British North America that lies between the northern branch of the river Saskatchewan and the frontier of the United States, with maps. 1859.'

IN the year 1857, Capt. J. Palliser was sent by the British Government to explore, 'that portion of British North America which lies between the northern branch of the river Saskatchewan and the frontier of the United States, and between the Red River and the Rocky Mountains.' The expedition was also to report on the feasibility of a route across the Rocky Mountains from the east to British Columbia, 'to ascertain whether any practicable pass or passes available for horses existed across the Rocky Mountains within British territory, and south of that known to exist between Mount Brown and Mount Hooker in latitude 54° 10′.'

Capt. Palliser's report to the Houses of Parliament is by far the most exhaustive early account of this western district of Canada. It was published in three blue-books, 1st part, 1859; 2nd part, 1860; and the 3rd and most comprehensive report in 1863. This last report contains the 'Journals and detailed account' of the expeditions.

These reports are rare and difficult to obtain. The one obtained recently for the Alpine Club library is the 1st part. The first man to cross the continent in Canada was Sir Alexander Mackenzie in 1793. A few explorers or fur traders had been as far west as the Rocky Mountains, but there is no record of their having got further. Mackenzie's route was

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by means of the Peace River and finally over the Divide to the head waters of the Fraser River.

About the beginning of last century David Thompson crossed the Rocky Mountains further south from the head waters of the Athabasca River to those of the Columbia. From this time onward few people penetrated into these far-off wilds, and the next important account we have is contained in these Journals of the Palliser Expedition. They are chiefly concerned with the passes south of the Athabasca Pass (crossed by Thompson) to as far as the boundary with the United States.

The passes they discovered were the Kananaskis, Vermilion, Kicking Horse, Kootanie, and the Crow's Nest Pass.

The difficulties of travel in those days were naturally great, especially on the west side of the mountains, where the forests and vegetation grow more thickly than on the east side. Deep rivers had to be crossed, and, for the most part, meat had to be obtained as best they could, and often they had to live on very short rations.

The member of the Expedition who covered much the most country was Dr. Hector. He was chiefly concerned with a search for passes in the most northern section explored by the party.

For the first part of the report, Capt. Palliser describes the discovery of the Kananaskis Pass, over the Rocky Mountains, from the Bow River to the Kootanie. Lieut. Blakiston crossed by another, further south, named the Kootanie.

But by far the best explorer of the party was Dr. Hector. He was also an accomplished naturalist and geologist, and, according to Capt. Palliser, 'the most accurate mapper of original country I have ever seen.' In the Palliser reports all the most interesting information about the mountains is from Dr. Hector.

There is in the first part, a short description of Hector's journey from the old Bow Fort, near where Banff is now, up the Bow River, over the Vermilion Pass, to the west side of the Divide. From there he went to the head of the Kootanie River to the Kicking Horse River and discovered the Kicking Horse Pass over which the Canadian Pacific Railway now runs. It was owing to his having been severely kicked by one of his horses in the chest and rendered senseless that he gave the name to the river and pass.

He naïvely remarks: 'My recovery might have been much more tedious than it was, but for the fact that we were now

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starving, and I found it absolutely necessary to push on after two days.' But it was not till five days later that they managed to kill a moose. He then remarked, 'we were relieved from want.'

He was then at the head of the Bow Valley, and might easily have gone down the river to the Old Bow Fort. Instead, however, he pushed north, through much deep snow, and thunderstorms, to the unknown country at the source of the Bow River, and thence down the Little Fork valley to the Saskatchewan. Here he measured the heights of Mts. Murchison, Balfour, and Forbes. His measurements, however, are considerably too high. He pushed up the Saskatchewan, discovered Glacier Lake, and ascended Peak Sullivan, whose height he gives as 8913 feet. As the season was far advanced he now returned down the Saskatchewan to Edmonton.

To those who have travelled over the same ground, Hector's daily marches seem extraordinary. He, for instance, averaged 24 miles a day with horses from Mountain House to Edmonton, and the last part of the journey was through thick snow. In the mountains it was the same. He not only managed to travel far each day, but at the same time hunted for game on the mountain side as well. He travelled from the Bow Valley to the Saskatchewan in three days; it now takes an ordinary party five or six days. It may be that there was not so much burnt timber then, yet he often mentions that he had to cut his way through burnt forest.

There is also a geological report of Dr. Hector's, in which he seems to have noticed all the most important geological features in every part of the country he traversed. Coal, fossils, glacier terraces, twisted rock strata, absence of volcanic rocks, and granite, &c.; nothing seems to have escaped him, and his reports are excellent reading.

Several of the more important mountains owe their present names to him: Mts. Ball, Lefroy, Goodsir, Balfour, Murchison, Forbes, Lyell, are some of them. In those days it was the custom to name nearly all the mountains in the Rocky Mountains after celebrated men. There are, indeed, no Indian names, as the Indians have only recently, since about 1840, occupied the district. Dr. Dawson says: 'The Stoney Indians attach definite names to very few natural features in the region, whether mountains or rivers.'

Although Palliser and his party had discovered various passes across the Rocky Mountains, yet they had not dis-

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covered the chief object of the expedition, 'a feasible route across the mountains from the east side of the Rocky Mountains to the Pacific Coast.' There is an immense mountain area west of the Rocky Mountains; the Selkirk Range and the Cascade Range form almost impassable barriers. Palliser in his report to the British Government despaired of ever connecting British Columbia with Eastern Canada. To quote his report: 'The manner in which natural obstacles have isolated the country from all other British possessions in the East is a matter of considerable weight; indeed, it is *the* obstacle of the country, and one, I fear, almost beyond the remedies of Art.' And again: 'The knowledge of the country as a whole would never lead me to advocate a line of communication from Canada across the Continent to the Pacific, exclusively through British territory. The time has now for ever gone by for effecting such an object, and the unfortunate choice of an astronomical boundary line has completely isolated the Central American possessions of Britain from Canada in the east, and almost debarred them from any eligible access from the Pacific Coast on the west.'

Palliser's forecast was too pessimistic, for in less than twenty-five years the Canadian Pacific Railway, from Montreal to Vancouver, was opened.

By far the most interesting part of the Journals, from a mountaineering point of view, are the descriptions of travel by Dr. Hector. He was a true pioneer, and anyone who proposes to make a lengthy expedition in the Rocky Mountains will get much good advice and information from his descriptions written sixty years ago. He found the Blaeberry Creek on the W. side of the mountains almost impossible to horses, and exploration on that side is no easier to-day than it was then.

It is worth mentioning that, after Palliser's expedition, up to the time when the Canadian Pacific Railway was opened, there are only two important accounts of the Rocky Mountains. The first, 'The North-West Passage by Land,' by Viscount Milton and Dr. Cheadle, 1863. They crossed the mountains from the Athabasca River to the Fraser River, over the Yellow Head Pass. The second, a voluminous report by Dr. Dawson on the physical and geological features of that portion of the Rocky Mountains between latitudes 49° and 51° 30′, with maps published in the Annual Report of the Geological Survey of Canada, 1886.

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The Early History of the Col du Géant and the Legend of the Col Major.

By HENRY F. MONTAGNIER.

THE researches of the many writers who have dealt with the history of this celebrated glacier pass have thus far failed to bring to light any trustworthy record of a passage earlier than that of the two Chamonix guides, Jean-Michel Cachat and Alexis Tournier, in 1787 ; and it is almost needless to recall the fact here that even the familiar name by which it is now designated dates only from de Saussure's memorable expedition of the following year. But we are assured, nevertheless, by the Rev. W. A. B. Coolidge, that the Col du Géant was undoubtedly used as a direct and convenient route between Courmayeur and Chamonix at least as far back as the middle of the seventeenth century.[1] The evidence brought forward by Mr. Coolidge in support of this affirmation may be briefly summarised as follows :

1. A long series of old maps of Savoy and the adjacent countries, dating from 1647 to the close of the eighteenth century, on which a pass apparently affording a direct route between the two villages is indicated under the name of ' Col Major.'

2. A few vague and contradictory references to this pass in the memoirs on the Alpine frontier compiled by the topographical service of the French Army during the eighteenth century.

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[1] See *A.J.* xviii. 59–61 ; *Jahrbuch S.A.C.* 1901, pp. 266–276 and 1902, p. 274 ; *Josias Simler et les Origines de l'Alpinisme*, 1904, p. cxiii ; *The Alps in Nature and History*, 1908, p. 202 ; and the *Revue Alpine*, 1911, pp. 230–232 ; 1913, pp. 229–250 and 448.

I note that Mr. Coolidge's views have undergone a considerable change since 1897 when he wrote in *A.J.* xviii. 60 : ' The name " Col Major " as applied to the Seigne is particularly interesting, as it disposes of an argument sometimes alleged that the pass *must* be the Col du Géant, whereas no doubt it might (in accordance with a general rule) have been used of any pass leading to or from the " Col Major " or Courmayeur (Curia Major).' For in his *Alps in Nature and History*, published eleven years later, he writes (on p. 202) that the Col du Géant ' is indicated under the name of " Col Major " on several maps from 1648 onwards, and so must have been known at that time.'

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3. A persistent tradition recorded by several travellers in the district before 1787, to the effect that there once existed a direct route between Chamonix and Courmayeur which became impracticable at some indeterminable date in consequence of certain changes in the glaciers.

In other words, Mr. Coolidge asks us to accept his assurance that the Col du Géant, a pass more than 11,000 ft. above sea-level, the crossing of which is still a serious undertaking, was sufficiently well known by the middle of the seventeenth century to be indicated on the best maps of Savoy as a practicable route for travellers, and that it was regarded by the French military authorities throughout the eighteenth century as a route of some strategic importance. Although conscious of my temerity in venturing to differ with the most learned of our Alpine historians, I shall endeavour in the present paper to show first of all that the Col Major and the Col du Géant were unquestionably two very different passes; and, secondly, that the legend of the abandoned route between Chamonix and Courmayeur is hardly worthy of serious consideration, except, perhaps, to students of Alpine folk-lore.

The Col Major of the Old Maps.

The eminent Genevese geologist, Professor Alphonse Favre, seems to have been the first to assert in unmistakable terms that the pass indicated on the old maps under this name was none other than the Col du Géant.[2] In his great work on the geology of the Mont Blanc district, published in 1867, we read:

'Il paraît qu'à l'époque où le savant genevois [de Saussure] explorait les Alpes, ce col était peu connu. Lui-même, malgré ses nombreuses courses, semble en avoir longtemps ignoré l'existence, et ce fut, nous dit-il, M. Exchaquet qui le lui fit connaître. Ce col avait été cependant souvent franchi dans le dix-septième siècle. Sur la carte publiée par Cornélius Dankerts vers 1660, on voit un chemin qui traverse le Col du Géant. Il va de *Chamonys* à *Cormajeur* près *Cramoyen*, par le *Cormajeur* ou *Col Major*. . . . Le nom de . . . *Col Major* fut changé par le Saussure en celui de col du Géant.'[3]

[2] Goffredo Casalis, in his voluminous *Dizionario Geografico . . . degli Stati di S.M. il Re di Sardegna*, vol. iv. p. 548, refers to the legendary pass, and adds that on the old maps it was always indicated, but he does not mention the name Col Major.

[3] *Recherches Géologiques dans les Parties de la Savoie, du Piémont et de la Suisse voisines du Mont Blanc*, 1867, vol. iii. p. 81. Professor

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I gather from this extract that Professor Favre, finding a pass indicated as a direct route between Chamonix and Courmayeur on a map issued about 1660, concluded that this route must be the Col du Géant, and consequently that it must have been frequently crossed during the seventeenth century. Such a deduction would be reasonable enough in dealing with a modern map such as the 'Carte Siegfried,' but in the case of a seventeenth-century cartographer it seems to me highly imprudent. Until the close of the eighteenth century the maps of Savoy teem with errors. Practically all the cartographers seem to have known about the range of Mont Blanc was that somewhere between the Val d'Aosta and Lake Leman there rose a chain of snowy mountains, but for a century and a half they were uncertain as to whether they lay to the N. or S. of the Chamonix valley. Even at a period well within the recollection of living members of the Alpine Club, a great snow-peak, over 13,000 ft. high, was indicated on the best Italian maps as the 'Mont Iseran,' which upon investigation proved to be non-existent. It seems to me, therefore, that in matters of detail the old maps must be regarded as extremely untrustworthy.

Professor Favre's identification of the Col Major was contested a few years later by M. Charles Durier, the author of the well-known monograph on Mont Blanc. In the first edition of his work, published in 1877, he asserted, somewhat hastily, that the supposed track drawn over the Col du Géant on the old maps was merely a frontier line. Finding this explanation unsatisfactory, however, he added a long footnote to a subsequent edition, in which he made light of Professor Favre's credulity. The seventeenth-century cartographers, he wrote, were under the impression that 'les

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Favre's statement that de Saussure deliberately changed the name of the Col Major to Col du Géant is repeated by Mr. Coolidge (*J.S.A.C.*, 1901, p. 266), who adds that, in his opinion, the change is to be regretted. As a matter of fact, there is no reason to believe that the great naturalist understood the Col Major to be the Col du Géant. In the course of a careful examination of his unpublished papers and diaries, I have never come across a single mention of the former pass. In a letter to his wife, written on the Col du Géant on July 3, 1788, he says: 'I have rebaptised this mountain. It has been called the Tacul, which is seven leagues off, while it is quite close to the splendid Aiguille du Géant, which is visible from Genthod. All the guides approve this change. . . .' See Mr. Freshfield's *Life of H. B. de Saussure*, p. 254.

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Glacières' (the range of Mont Blanc) lay to the N. of the Arve valley; hence they saw no difficulty in connecting Chamonix and Courmayeur by a direct route, and he pointed out the important fact that the Col Major disappears from the maps of Savoy precisely at the time when the cartographers first began to delineate the Mont Blanc district with some degree of accuracy. As they failed to indicate on their maps the old route from Courmayeur to Chamonix by the Col Ferret and the Col de la Forclaz, M. Durier suggested that they very likely had in mind those two passes.[4] It is only fair to add that M. Durier's conclusions were based upon a very superficial examination of the question: had he pursued his investigations a little further, I have no doubt that he would have hit on the solution of the problem set forth in the following pages.

Mr. Freshfield, in his remarkable paper on the history of the Buet, in the ALPINE JOURNAL vol. ix, has also expressed the opinion that the old maps and the legend of the abandoned pass cannot be accepted as conclusive evidence that the Col du Géant was known in early times, although he thinks it possible that it may have been crossed occasionally by chamois hunters, smugglers or refugees before the first recorded passage in 1787.[5]

With the exception of M. Durier and Mr. Freshfield, no one has, as far as I am aware, seriously questioned the views set forth by Professor Favre. The Col Major-Col du Géant theory has found in Mr. Coolidge an able and tenacious advocate who has brought to bear on the subject a wealth of erudition for which I can only express my warmest admiration. In recent years Mr. Coolidge has reiterated his firm belief that the Col du Géant was formerly known as the Col Major so persistently that it now appears to be generally accepted by writers on Alpine history as an established fact. M. Henri Ferrand, our distinguished honorary member, has also expressed the same opinion on several occasions;[6] and M. Louis

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[4] See *Le Mont-Blanc*, 1877, p. 485, and 3rd edition, 1881, pp. 41–42.

[5] In his *Life of H. B. de Saussure* (1920), pp. 241–244, Mr. Freshfield again dismisses the legend as uncertain proof, and suggests that the Col Major indicated on the old maps is either a cartographer's or a copyist's error.

[6] See *Bull. de Géographie Historique et Descriptive*, 1906; and *La Montagne*, 1911, pp. 617–634.

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Kurz, in the last edition of his admirable guide to the range of Mont Blanc, published in 1914, writes with regard to the Col du Géant, 'C'est le Col Major des anciennes cartes 1647–1787.'

The earliest mention of this mysterious pass that I have met with, personally, occurs on three maps by the celebrated cartographer, Nicholas Sanson, entitled:

(1) Haute Lombardie et Pays Circonvoisins où sont la Savoye, etc., dated 1647.

(2) Les Suisses, les Alliés des Suisses, leurs Sujets, etc., dated 1648.

(3) Le Gouvernement Général du Daufiné et des Pays Circonvoisins où sont la Savoye, etc., dated 1652.

On the first of these our pass is indicated by a small cross between Chamonix and Courmayeur, and considerably to the E. of 'les Glacières,' under the name of *Col Major ou Cormoyeu.* On the second the name reads *Col Maior ou Cormoyeu.* On the third map well-defined tracks are drawn over the principal passes. Starting from Aosta one leads over the Great St. Bernard; the next (to the W.) leads by *Cormoyeu* over the *Col Major ou de Cormoyeu* to *Chamony*, and thence along the right bank of the Arve to Passy; while the third and fourth cross the Little St. Bernard and the Col de Grisanche (Col du Mont) respectively.[7]

At first sight the pass thus indicated undoubtedly appears

[7] The Col Major is indicated by other cartographers as *Cell Major* (Sandrart's *Ducatus Sabaudiae*, circa 1670); *Cormajeur, Colmaior* (P. Lea's *New Map of the Dukedom of Savoy*, 1690); *Colmaior* (W. Berry's *Kingdom of France*, 1680); *Colmaior, Cormoyeu* (Jaillot's *Royaume de France*, circa 1710); *Col de Cormoyeu* (F. de Witt's *Carta Nova Accurata del Passagio et Strade dalli Paesi Bassi per via de Allemagna*, 1671), while Courmayeur is variously written *Cormajor, Cortemaggiore, Cormoyeu, Cramoyen, Curia Major, Courmaior*, &c. On several maps the name Col Major ou Cormoyeu seems to be attributed to the village of Courmayeur rather than to a pass. It is quite possible therefore that 'Col' is merely a corruption of, or a copyist's error for, 'Curia.' Bordier (*Voyage Pittoresque aux Glacières de Savoye*, 1773, p. 254) refers to 'Col Mayor ou Cormoyeu' in the Val d'Aosta as a village. Ch. Denina (*Tableau . . . de la Haute Italie et des Alpes qui l'entourent*, 1805, p. 173) says: 'Le nom de *Cour-Mayour*, fait par corruption de *Colle Majore*, ou peut-être, suivant M. Bourrit, de *Curia*, or *Corte* (pour *Cohorte*) Majore.' . . .

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to be none other than our Col du Géant, for the track leads direct from Courmayeur to Chamonix instead of describing a long curve around 'les Glacières.' But if the three maps are examined attentively it will be seen that there is no trace of the mule paths leading from Courmayeur to Chamonix around the range of Mont Blanc by the Col Ferret and the Col de la Forclaz to the E., and the Col de la Seigne and the Col du Bonhomme to the W. Yet the history of these passes can be traced far back into the middle ages.

After examining a large number of old maps on which the Col Major is indicated, it seems to me that the only conclusion we can safely draw is that Sanson and his successors knew that there was a route between Aosta and the Arve Valley which crossed the main chain of the Alps somewhere between the two St. Bernards. Now in the seventeenth century, as well as at the present time, the most convenient route for a traveller proceeding on horseback from Aosta to Bonneville would be by Courmayeur over the Col de la Seigne to Chapieux, and thence over the Col du Bonhomme and down the valleys of Montjoie and the Arve. And this, I think, is unquestionably the route which the cartographers for a hundred and fifty years understood to be the Col Major. That Sanson could possibly have intended to indicate as a practicable route for travellers such a pass as the Col du Géant, instead of an easy mule-path which lay near at hand, is utterly inconceivable. If the track is drawn on his 1652 map in a more or less straight line between Chamonix and Courmayeur instead of making it pass by Chapieux, Plan des Dames,[8] and Notre Dame de la Gorge, the mistake

[8] De Saussure describes the Plan des Dames, as follows, in his *Voyages dans les Alpes*, sect. 760–761: ' . . . on entre dans une plaine plus que demi circulaire, fermée par les rochers du Bon-Homme et autres cimes qui y tiennent, et couverte d'un beau tapis de gazon. C'est la plaine ou *Plan des Dames*. Je ne doute point qu'elle n'ait été anciennement consacrée à Jupiter, ce nom et celui de Val de Mont Joye que porte la vallée qui y conduit, ne permettent pas d'en douter. La belle verdure qui la couvre et l'enceinte de rochers qui la renferment, sembloient inviter à y construire un temple ou un hospice; je n'ai cependant pu en trouver aucun vestige. . . . On voit au milieu de cette plaine un monceau de pierres de forme conique de 10 à 20 pieds de hauteur, sur 15 à 20 de diamètre. Sous ce monceau de pierres reposent, à ce que porte une ancienne tradition, les corps d'une grande dame et de sa suivante, qui, surprises là par un orage y moururent et furent enterrées sous des débris de rochers. Ce monceau s'augmente d'un jour à l'autre,

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must be attributed to his ignorance of the topography of the district or his carelessness as a draftsman.

It is a well-known fact that the early cartographers were notorious plagiarists. Until the beginning of the last century most of them copied, without acknowledgment, the errors as well as the improvements of their predecessors and contemporaries. Moreover, during the period we have to deal with, astonishingly little progress was made in the delineation of the Alps of Savoy. Hence it is not at all surprising to find Sanson's mistake regarding the Col Major reproduced in a long series of maps during the ensuing hundred and fifty years. On Borgonio's great map of the States of the Duke of Savoy, published in 1683, the Col Major is omitted. But it soon reappears, however, on Hubert Jaillot's 'Estats de Savoye et de Piémont,' in 1690. On this map a broad track, which might easily be mistaken for a carriage road, leads from Aosta by *Doulina* (Dollone, a hamlet near Courmayeur) over the *Col Major* to *Chamunis*, and thence along the right bank of the Arve to Bonneville, La Roche, and Bonne. The name *Plan des Dames* appears in large letters between *Champion* (Chapieux) and Notre Dame de la Gorge, but there is no sign of either the Seigne or the Bonhomme passes. It is not until 1772, when Stagnoni issued his revised edition of Borgonio's map, that we find the last-mentioned passes clearly indicated for the first time. On this map the track leads from Aosta by *Dolina* (Dollone) over the *Col de l'Allée Blanche* to *Compieut* (Chapieux), whence a route branches off to the N., crossing the *Mont de la Sacha*, underneath which name we read *Bonome*, to Notre Dame de la Gorge, and thence on to Bonneville and Geneva; and the Col Major former track is omitted. From this date the Col Major as a direct route between Courmayeur and Chamonix gradually disappears from the maps of Savoy, and is replaced by the Col de la Seigne and the Col du Bonhomme. In 1790, on the map accompanying the 'Itinéraire de la Vallée de Chamouni,' by Berthoud van Berchem and dedicated to de Saussure, we find the Col du Géant indicated for the first time as the *Route de Cormayor et situation de la Cabane de Mr. de Saussure.* It is interesting to note

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parce que c'est l'usage que tous ceux qui passent là jettent une pierre sur ce tombeau.'

It is strange, to say the least, that a small uninhabited plain should be mentioned in large letters, apparently as an important place, on the principal maps of Savoy for more than a century and a half.

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that this little map, which is entitled 'Carte en Perspective de la Vallée de Chamouni et des Montagnes avoisinantes dans le Haut Faucigny,' was drawn by the young Vaudois engineer Charles-François Exchaquet, who, as we shall see further on, made in 1787 the first passage by a traveller of the Col du Géant.

The Col Major of the 'Ingénieurs-Géographes.'

The topographical service of the French Army known as the corps of 'ingénieurs-géographes' was founded in 1691 by Vauban, the celebrated minister of war of Louis XIV. From that date until the outbreak of the Revolution the task of mapping and reconnoitring, from a military point of view, the Alpine and Pyrenean frontiers was carried on by a series of engineers of exceptional competence and energy. A few of them, such as La Blottière, Bourcet, and Montannel, acquired in the course of many years' work in the field a knowledge of the Alps from the Mediterranean to Lake Leman which probably remained unequalled until the days of John Ball and F. F. Tuckett a century later. Their maps were usually accompanied by detailed reports or memoirs on the routes and passes of the Alps containing information likely to be of use in time of war; but unfortunately only a few of these documents have been published. They give the impression of being compilations rather than the work of individual writers, and in many cases there can be no doubt that memoirs drawn up early in the eighteenth century were subjected to continual revision by the authors' successors and not infrequently reissued under the names of the last engineers who revised them. Moreover, a certain amount of the information they contain regarding passes in foreign territory must necessarily have been obtained at second hand; consequently one finds in them here and there obscure passages which it is by no means easy to interpret satisfactorily.[9] I give below in chronological order all the references to the Col Major in the memoirs of the 'ingénieurs-géographes' that have come to my knowledge.

Brunet de l'Argentière, 1742.—*Communications entre le Briançonnais, la Savoie et le Piémont.*[10]

[9] See *Les Ingénieurs-Géographes Militaires: Études Historiques par le Colonel Arvers*, 2 vols., Paris, 1902.

[10] An unpublished MS. in the library of M. Paul Guillemin at Cervières, near Briançon, to whom I am much indebted for per-

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According to this writer three streams meet at the village of Chapieux:

'Le premier ruisseau vient du centre qui est un grand et rapide penchant de pâturages pelouses où il y a plusieurs cabanes de bergers; au sommet est le col du Bonhomme qui va à Notre Dame de la Gorge dans le haut Foussigny.

'Le deuxième vient de la droite appelée les blanches à l'extrémité de laquelle est le Col Mayor; du Chapieu sur le col il faut deux heures et de dessus la montagne à la paroisse du Col Mayor près de Morges, vallée d'Aouste, il faut six heures; ce chemin est mauvais et peu fréquenté.

Le troisième ruisseau vient de la gauche d'une gorge où est le col ou pas de Rosselin, qui du Chapieu va à Beaufort et où il passe en été des mulets chargés de fromages. . . .'

The pass described here as the Col Mayor or Col Major is unquestionably the Col de la Seigne. The name 'les blanches' (*Laix Blanche*) is attributed to the ridge or the summit of the pass, in which the writer agrees with P. A. Arnod, who in his description of the route from Chapieux to Courmayeur written between 1691 and 1694, writes: 'Ce terrain monte insensiblement jusqu'à la cime appelée la Laix Blanche de Courmayeur.' [11] The 'times' given by our author are also fairly correct as he counts eight hours from Chapieux to Courmayeur, whereas according to the last edition of Murray's Handbook (1909) the journey requires seven hours and a half.

The next reference by the same author to the Col Major is less clear. Descending the Montjoie Valley, Brunet de l'Argentière writes:

'En descendant à la gauche du Bonan [Bon Nant] (jusques vis-à-vis le village de Condamines) on le passe sur le pont de Tadieu; on laisse un chemin qui va de Beaufort, passant par St. Nicolas de Vérouse et les montagnes qui sont au dessus;

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mission to quote it. Some extracts from another MS. copy of this memoir were published in *A.J.* vol. x. pp. 275–278, by M. Henri Duhamel. Jean Brunet (1700–1755) was a 'commissaire des guerres' rather than a topographical engineer. A valuable memoir by him entitled *Le Briançonnais en 1754*, with an introduction by M. Guillemin will be found in the *Ann. de la Soc. des Touristes du Dauphiné*, 1892: and Colonel de Rochas d'Aiglun has also reprinted as a separate pamphlet his *Mémoire de la Guerre sur les Frontières du Dauphiné et de la Savoie de 1742 à 1747*, Paris, 1887.

[11] *Josias Simler et les Origines de l'Alpinisme*, p. *270.

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de ce pont on arrive au village de Dioné [Bionnay] entre lequel et St. Gervais il y a un ruisseau qui grossit le Bonan et qui vient des glacières qui le séparent de la Val d'Aouste et qui régnent depuis le Col du Bonhomme jusques Chamony sans qu'il y aye aucun passage praticable pour traverser du Foussigny dans la vallée d'Aouste : celui que plusieurs cartes et mémoires marquent de Col Mayor à Salanches et qui formoit une branche du col de ce nom parallèle à celle qui y va du Chapieu n'existe plus depuis longtemps, ayant été bouché par des éboulements des glacières.'

It would seem from this that the author was under the impression that there were two parallel routes both known as the Col Major. One of these he identifies as the Col de la Seigne, while he understood the other to be a pass situated further to the east which had become impracticable many years earlier. I shall refer to this abandoned pass further on in quoting the memoir by Montannel.

Lieut.-General P. J. de Bourcet, 1752.—*Mémoire de M. Bourcet relatif à sa carte manuscrite des Passages des Alpes.*[12]

On pages 118–119 of this memoir we find the following description of the Aosta valley :

' Cette vallée est fermée à son extrémité du côté du Piémont, par le château de Bard, et par Ivrée qui sont deux places fortifiées appartenant au roi de Sardaigne, et qui demandent des précautions considérables pour être assujetties. On n'y communique de la Savoie que par les cols du Grand et Petit St. Bernard et par les cols Major et de Grisanche.

' *Le Grand St. Bernard* est un col assez ouvert, on peut y passer avec des bêtes de charge. . . .

' *Le Petit St. Bernard* est au-dessus du village de St. Maurice dans la Haute Tarentaize ; il est très praticable pour les chevaux et les bêtes de charge. . . .

' *Le Col Major* est long et difficile, on ne peut se promettre de communiquer de Salanche et Chamunis (en Faucigny), à Morges, dans la vallée d'Aost, en moins de deux grandes

[12] This memoir is printed in *Voyage d'Inspection de la Frontière des Alpes en 1752 par le Marquis de Paulmy*, with an introduction by M. Henry Duhamel, Grenoble, 1902. Pierre-Joseph de Bourcet (1700–1780) was by far the most eminent of the ' ingénieurs-géographes.' See *Les Bourcet et leur Rôle dans les Guerres Alpines*, by Colonel de Rochas d'Aiglun, Paris, 1895.

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journées de marche et par des défilés considérables où l'on ne trouve aucune habitation.[13]

Le col de Grisanche communique de la plaine de Sexte, par Ste Foy, à Derbe et à la Cité d'Aost ; mais ce col n'est praticable que pour les gens de pied.'

As the Col Major is described in the above extract as the *only* route between Aosta and the Faucigny, it is, I think, obvious that Bourcet had in mind the mule track over the Col de la Seigne and the Col du Bonhomme. Mr. Coolidge quotes the lines referring to the Col Major without the context as an early account of the Col du Géant,[14] but it would seem from Bourcet's definition of the term ' col ' that he used it in the sense of a passage free from snow during the summer months, and of easy access, a description which can hardly be applied to a difficult glacier pass. He writes :

' La plaine de Piémont est séparée de la Savoie, du Dauphiné et de la Provence par des montagnes fort élevées qui n'en permettent l'entrée que par des chemins très difficiles, au travers de ces mêmes montagnes. Ces chemins s'appellent du nom général de cols ; les uns sont praticables pour des voitures et peuvent servir au transport de l'artillerie ; les autres ne le sont que pour les bêtes de charge, et les plus difficiles ne sont praticables que pour les gens de pied. Mais tous sont fermés pendant près de huit mois de l'année par les neiges, en sorte que l'on ne saurait entreprendre un passage au travers les Alpes que pendant les quatre mois de juin, juillet août et septembre ; à la vérité dans ce temps-là on communique facilement partout.'

Marquis de Saint-Simon, 1759.—*Histoire de la Guerre des Alpes . . . de* 1744, &c. Amsterdam, 1759, p. 33.

' On n'arrive à la vallée d'Aoste que par le Col du Grand St. Bernard, le Col Major, et ceux du Petit St. Bernard et de Grisanche : elle est fermée vers son débouché dans le Piémont par les châteaux de Bard et d'Yvrée.

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[13] Compare this with Bourrit's description of the route from Nant Borrant to Chapieux in 1774 :

' Nous ne pûmes cependant quitter cette frêle habitation sans regrets ; c'étoit la dernière demeure des hommes ; nous n'en devions plus trouver pendant neuf lieues de marche qui nous restoient à faire dans cette journée.'—*Description des Aspects du Mont-Blanc*, p. 29.

[14] *Revue Alpine*, 1913, p. 246.

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'Le Grand St. Bernard est un col assez ouvert, où l'on peut passer avec des bêtes de charge. . . .

'Le Col du Petit St. Bernard est audessus du village de St. Maurice sur l'Isère dans la haute Tarentaise; les bêtes de charge y peuvent passer. . . .

Le Col Major entre les Cols du Grand et du Petit St. Bernard est long et difficile et communique à Chamouni en Faucigny; il arrive à Morges après deux grandes journées de marche dans des défilés continuels et sans habitation; c'est par là que l'on croit que les romains ont passé. . . .

'Le Col de Grisanche communique par une petite plaine à Ste Foy et Sale, un peu au dessous de Morges; ces deux défilés pour entrer dans la vallée d'Aoste sont si difficiles qu'ils ne peuvent servir qu'aux gens de pied et qu'un cheval y peut à peine suivre son cavalier.'

Here again we find the Col Major described as the only pass between the Aosta valley and the Faucigny; consequently there can be no doubt that M. de Saint-Simon referred to the Seigne and Bonhomme passes. Mr. Coolidge, in quoting the lines referring to the Col Major as an early account of the Col du Géant, omits the concluding paragraphs in which the writer says the last-mentioned passes are so difficult that a horse can scarcely follow its master over them.[15]

Marquis de Pezay, 1775.—*Noms, Situations et Détails des Vallées de la France le long des Grandes Alpes . . . et de celles qui descendent des Alpes en Italie*, with a preface by M. Henri Duhamel, Grenoble, 1894.

On page 60 M. de Pezay writes that the Aosta valley can be reached only by the Faucigny and the Tarentaise.

'De la Tarentaise,' he continues, 'on débouche par les cols du Petit Saint-Bernard et de Grisanche; mais du Faucigny on ne peut y déboucher que par le seul Col Major, qui est long et difficile. De sorte que, pour entreprendre sur la val d'Aoste, il faut nécessairement occuper la Tarentaise et ne se servir du Faucigny que pour quelque détachement particulier.'

In the above extract M. de Pezay agrees with General de Bourcet and the Marquis de Saint-Simon in describing the Col Major as the only route connecting the Faucigny and the Aosta valley, or in other words as the mule track from Aosta to Bonneville by the Col du Bonhomme and the Col de la Seigne. On the next page he discusses the possibility of sending troops

[15] *Revue Alpine*, 1913, p. 246.

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into the Aosta valley by the little St. Bernard and the Col Major, which I think proves conclusively that he did not understand the Col Major to be the Col du Géant.

MONTANNEL, 1776.—*La Topographie Militaire de la Frontière des Alpes. Editée par les soins de M. A. Rochas d'Aiglun*, Grenoble, 1875.

On pages 8–11, in a list of some sixty passes along the main chain of the Alps, we find the following reference to the Col Major:

'Il y a encore au delà de ce dernier col [le petit St. Bernard] et sur la grande chaîne des Alpes, le Col de l'Allée Blanche et le Col Major. Ce dernier n'est plus susceptible de passage; les pluies et la fonte des neiges l'ont rompu. Au delà du Col Major est celui du Grand St. Bernard.'

Again on page 188 the author considers the pass from a military point of view:

'L'ennemi peut aussi venir de la Valdost au Chapuy sans passer par le Petit St. Bernard. Pour cet effet, il n'a que passer l'endroit appelé l'Allée Blanche et par celui que l'on nomme les Glaciers et tomber de là sur Chapuy; mais il ne peut faire usage de cette route, à cause des neiges, que deux mois de l'année. Enfin si l'ennemi accommodait le Col Major, qui est actuellement tout dégradé et impraticable, il pourrait venir par ce col de la Valdost dans la vallée de Faussigny; mais ce chemin serait des plus rudes et praticable seulement deux mois de l'année, en sorte qu'il n'est guère probable que cet ennemi passe jamais le Col Major dans l'objet de venir sur le Rhône en corps d'armée. Je ne dis pas de même du Grand St. Bernard. . . . Au reste le chemin qui passerait le Col Major tomberait sur Chamunis, de là il viendrait à la Cluze. . . .'

Finally on page 193 we read:

'Le Col Major est entièrement ruiné; les habitants de Sallanches m'ont dit en 1769 qu'on n'y passait plus depuis trente ans.'

Mr. Coolidge maintains that the Col Major described in the above extracts is undoubtedly the Col du Géant, but it is obvious, I think, that the author refers to a pass over which there was a mule track or at least a path. And I fail to see how a glacier pass like the Col du Géant could be affected either by rain or melting snow, or how it could possibly be *put in order* by a Piedmontese army.

As a matter of fact Montannel was very probably misled by

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the old maps, with which, as a topographical engineer, he must have been familiar; and his knowledge of the district was moreover extremely vague. He crossed the Col du Bonhomme, it is true, and explored the immediate neighbourhood of the Little St. Bernard, but we may be certain that he did not visit either Chamonix or Courmayeur, otherwise he would have discovered at once the absurdity of supposing that the two villages were connected by a direct route.[16]

We have seen that Brunet de l'Argentière, writing in 1742, says the Col Major had been closed many years earlier by 'des éboulements des glaciers.' This is confirmed by Montannel, who writes that in 1769 he was told at Sallanches that the pass was completely ruined and that it had not been crossed for thirty years.

These two statements are supposed to corroborate the story so long current on both sides of the range of Mont Blanc that there was once a direct route over the glaciers from Chamonix to Courmayeur. But it seems highly probable, on the contrary, that our two authors refer to a very different pass. There are reasons for believing that there was a route leading from the Montjoie valley into the Allée Blanche which was abandoned

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[16] Michel-Jean-Auguste Cruels, *dit* de Montannel (1714–1785). See Colonel de Rochas d'Aiglun's *Les Bourcet etc.*, p. 22. In a letter from the Chevalier de Janvres to H. B. de Saussure, dated February 6, 1780, which has recently been communicated to me by M. Raymond de Saussure, I find the following interesting reference to Montannel:

'Je suis fâché de n'avoir pas eu l'idée dans votre passage en cette ville [Grenoble] de vous avoir fait faire connoissance avec un ingénieur géographe de cette ville nommé M^r^ de Montannel, qui a parcouru toutes les Alpes, et qui les a toutes dessinées en vue d'oiseau telle que la dernière planche de votre 1^er^ tome. Les dites cartes sont très grandes et entrent dans les détails très circonstanciés pour pouvoir servir à un général d'armée qui seroit chargé de la conduite des troupes. Cet ouvrage unique est accompagné de 3 gros manuscrits qui contiennent ses observations; il destine ses ouvrages au Roy, cependant je crois qu'il ne seroit pas facile de le détourner de cette idée si un particulier vouloit en faire l'acquisition. Il n'est pas intéressé, mais sa santé est si délabré qu'il seroit à propos qu'il se mît dans une certain aisance pour la soigner. Si vous repassez dans ce pays, je vous le ferois connoître et je suis garant du plaisir que vous aurez à l'aspect de ses cartes qui embrassent depuis le cours du Var jusques et au delà du lac de Genève. Il n'est pas l'ami de M. Bourcet, il prétend que c'est sur les connoissances qu'il lui a donné que notre commandant doit la haute réputation qu'il s'est acquise dans la connoissance de nos montagnes.'

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in the first half of the eighteenth century in consequence of certain changes in the glaciers.

Dr. A. Matthey, a Genevese physician who practised for many years at St. Gervais-les-Bains, writes in 1818 in a description of the Glacier de Miage Français:

'On traversoit autrefois ce glacier pour aller à Cormayeur; on y alloit en six heures: cette route n'est plus praticable aujourd'hui.'[17]

And in 1826 we read in a work on Switzerland by the French traveller Raoul-Rochette:

'Ce glacier de Miage offre une autre singularité. Il n'y pas longtemps qu'on pouvait le traverser dans toute son étendue, sans beaucoup de difficultés; et M. Gontard, qui connait si bien la région, m'assura qu'on se rendait par cette route de St. Gervais à Courmayeur en six heures de temps. Il paraît même qu'à l'époque où la France cherchait à s'assurer l'empire de l'Italie, au moyen des communications les plus promptes et les plus directes, un projet fut conçu pour ouvrir, par le glacier de Miage, une route militaire qui eût pu conduire en un jour de Genève à Turin. On croyait n'avoir affaire ici qu'à la nature, et l'homme qui foulait sous ses pieds tous les trônes, ne devait pas s'attendre à être arrêté par les Alpes. Des ingénieurs furent envoyés sur les lieux: un directeur-général s'y rendit en poste de Paris; et le glacier fut sondé dans tout son cours. Mais cette entreprise gigantesque n'eut pas d'autre résultat. Dans l'interval de quelques années, les glaces s'étaient accumulées, au point d'opposer des obstacles insurmontables à tout effort humain; la puissance de celui qui ne connaissait pas de borne à sa fortune, recula devant cette barrière inattendue, et aujourd'hui, cette route, qui s'est trouvée fermée pour un conquérant, n'est plus praticable que pour le montagnard.'[18]

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[17] *Les Bains de Saint-Gervais, près du Mont-Blanc*, Genève, 1818, p. 25.

[18] *Lettres sur la Suisse*, Paris 1826, vol. iii. p. 304. On pages 379–380 Montannel gives the following account of the Mont Blanc chain:

'Cette chaîne, après avoir montré vers son milieu une haute pointe appelée le Mont Maudit, se termine sur l'Arve au-dessous de la Bonneville. On ne peut rien voir de plus affreux que cette chaîne, particulièrement vers Chamounix; on trouve là un glacier éternel où la neige paraît toute l'année. Il y a sur cette chaîne un passage par lequel on peut, malgré cela, aller à cheval, et après que les neiges sont fondues, depuis la Bonneville jusqu'à celle de

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If there is any truth in the tradition thus recorded by Dr. Matthey and M. Raoul-Rochette, the abandoned pass between St. Gervais and Courmayeur they mention can only be identified as the Col de Miage. It is quite possible, therefore, that Brunet de l'Argentière and Montannel may have heard vague stories about this legendary pass in Sallanches or St. Gervais and assumed without further investigation that it was the route indicated on their maps as the Col Major.

A more plausible solution of the problem is suggested by a few lines in the diary of Mr. A. T. Malkin, an early member of the Alpine Club who crossed the Col du Bonhomme in 1845. At the village of Nant Borrant he writes :

'A passage formerly led by the Trelanlai [Trélatête ?] and Miage Glaciers from this spot into the Allée Blanche. The keeper of the chalet told me seriously that a company had been talked of to re-arrange the route, which, he said, half a dozen men might soon do, by cutting stairs here and there in the rocks, the change in the glacier having rendered the old route impassable. It must be very high, probably 11,000 feet.' ('A.J.' vol. xv. p. 125.)

Mr. Coolidge suggests that this pass was very likely the Col dit Infranchissable. But it seems to me far more probable that Mr. Malkin refers to the Col du Mont Tondu, which is described in the first edition of the *Alpine Guide* as the Col de Trélatête. In the new edition (1878) Mr. Ball says this route saves not less than five hours on the way to Chapieux, which is doubtless an exaggeration although it must be several hours shorter than the Col du Bonhomme or the Col des Fours.

Saint-Maurice sur le Rhône. Cette communication passe par Taninge, Samoëns, Champerey et Trétouren. Ces deux derniers villages appartiennent au Valais. Il est à remarquer que cette communication laisse le mont Maudit à sa gauche, du moins quand on va de la Bonneville à Saint-Maurice.'

The peak described here as Mont Maudit is unquestionably Mont Blanc. Yet our author says that a traveller proceeding from Bonneville *via* Taninges, Samoëns, the Cols de Golèse and de Coux, Champéry and Trois-Torrents, to Saint-Maurice would pass the Mont Maudit on the left. As a matter of fact, Montannel was undoubtedly misled by the mistake of a large number of seventeenth and eighteenth century cartographers in placing the 'Glacières' to the N. of the Chamonix Valley. On Jaillot's *Les Duchés de Savoye, de Genevois, de Chablais, etc.*, the Mont Maudit is placed to the N. of Morzine and Samoëns and due W. of Champéry. Had Montannel ventured into the Chamonix Valley he would certainly have discovered at once this error.

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'The last ascent,' he adds, 'is made up a face of rock which appears alarmingly steep to those who approach it from the opposite direction, but the stair-like ledges make it quite free from difficulty.'

COLONEL BROSSIER, 1800.[19]—*Notes Descriptives sur tous les Cols et Passages qui communiquent de France en Piémont, depuis le Col Ferret jusques au Col des Trois-Evêques.*

In the preface to this memoir dated Grenoble, 13 Pluviose, An VIII, (February 2, 1800), the author says he was employed on the frontier from 1796 to 1799. He adds that in the preparation of his work he consulted various memoirs by La Blottière, Bourcet, etc., as well as the principal maps of France and Savoie. Consequently it seems to me that his opinion regarding the identity of the Col Major is decisive. Now the heading of Colonel Brossier's account of the Col de la Seigne reads :

'Col de la Seigne ou de l'Allée Blanche, indiqué dans plusieurs cartes et mémoires sous le nom de Col Major.'

LIEUT.-GENERAL P. J. DE BOURCET, 1802.[20]—*Mémoires Militaires sur les Frontières de la France, du Piémont et de la Savoie, depuis l'Embouchure du Var jusqu'au Lac de Genève. Paris et Strasbourg, An X* (1802).

On pages 40 and 158 the author mentions separately both the Col du Bonhomme and the Col de la Seigne ; but on page 160, under the heading 'Chemins qui, de la Tarentaise, vont dans la Savoie, le Faussigny et le Piémont,' we read :

'De Chapières [Chapieux] l'on peut encore entrer dans la vallée d'Aoust, en passant par Gloenier [Glaciers], l'Allée-blanche, le col Major et Doulina [Dollone], d'où l'on va à Morges.'

Here the Col Major is clearly the Col de la Seigne. Yet, curiously enough, on the map accompanying the volume we

[19] An unpublished MS. in the library of the late M. Henry Duhamel at Gières, near Grenoble. Simon-Pierre Brossier (1751–?) entered the corps of 'ingénieurs-géographes' in 1775 and rose to the rank of 'maréchal des camps.' See *Campagne de l'Armée de Réserve, Passage du Grand St. Bernard par le Capitaine Cugnac*, Paris 1900, p. 373.

[20] Although published under the name of General de Bourcet it is by no means certain that the memoirs in this volume were written by him. The first, which I have quoted above, is generally attributed to La Blottière, and is said to have been written about 1713. It must have been frequently revised however, as it contains many references to events which occurred as late as 1745.

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find a direct route between Courmayeur and Chamonix indicated as the 'Col de Malay,' a name very likely invented in 1802 by the editor of the volume. On page 160 we find the following footnote by the editor:

'M. de Bourcet ne parle point du col de Malay dans ses mémoires; c'est ce qui nous a fait douter de son existence, comme nous l'avons dit dans la table à l'article de ce col.'

And in the table at the end of the volume (page 349) he adds:

'Quelques cartes assez estimées ayant indiqué ce col on l'a conservé, par respect pour elles, quoiqu'on n'en ait d'ailleurs aucune connoissance et que les glaciers du Mont-Blanc rendent son existence très-problématique.'

The foregoing extracts comprise, I believe, all the important references to the Col Major before 1802 that have yet been brought to light. Of the six authorities I have quoted no less than four describe it in unmistakable terms as either the Col de la Seigne or as that pass combined with the Col du Bonhomme; while two refer vaguely to an abandoned pass somewhere between the Col de la Seigne and the Great St. Bernard and in the neighbourhood of the former, I have shown moreover, that there are excellent reasons for believing that this abandoned pass lay between the Montjoie valley and the Allée Blanche. In any case it seems to me certain that neither the Col Major nor this abandoned route had anything in common with the great glacier pass we now know as the Col du Géant.

(*To be continued.*)

The Early Swiss Pioneers of the Alps.

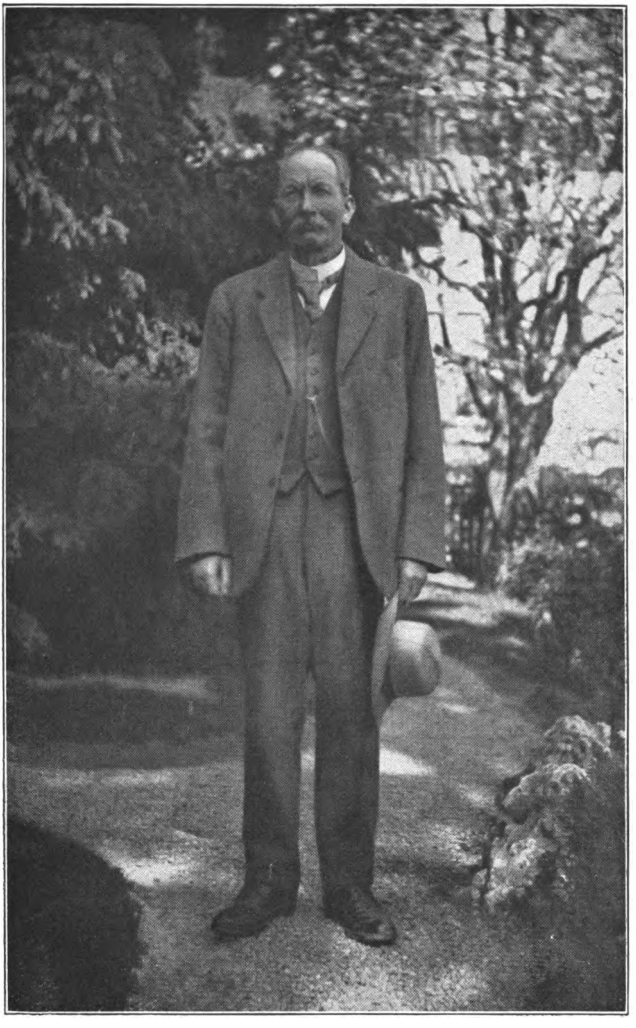
By Dr. H. DÜBI.

(*Continued from p.* 234.)

Franz Joseph Hugi.

HUGI was born on January 23, 1796, at Grenchen, canton of Soleure, where he was educated, proceeding thence to the universities of Landshut and Vienna. Upon his return he was appointed teacher of natural science at the *Realschule* and principal of the orphanage at Soleure. His work left him time to make long journeys—thus from 1821 onwards

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DR. H. DÜBI
1920

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he visited the Jura, the Alps, Germany, Hungary, Italy, and Northern Africa, collecting many objects of natural history, which he presented, about 1830, to the museum founded by the town of Soleure at his instigation. He was also founder, and for a long time President, of the Cantonal Society for Natural History and Science. In 1833 he was promoted professor of physic, and in 1835 professor of natural science, at the Gymnasium, which he resigned in 1837, on conversion to Protestantism. He, however, remained director of the Museum, and was in active correspondence with several learned societies in Switzerland and abroad—*e.g.* the Royal Physical Society of Edinburgh. He died at Soleure on March 25, 1855.

Beside his *Naturhistorische Alpenreise* (1830) and *Ueber das Wesen der Gletscher und Reise in das Eismeer* (1842), he published in his later life books and pamphlets in defence of his theories of glacier phenomena and erratic blocks in answer to the severe criticism of Agassiz and others.

What concern us chiefly are his wanderings in the Alps. I agree with Capt. Farrar [1] that Hugi's work as a mountaineer has been unjustifiably underrated. His itineraries are hard to follow, as in his books he preserves neither chronological nor topographical order. Thus chapter ii. of his *Alpenreise* refers to 1828; the narrative then jumps to chapter iv., p. 92, and then to chapter vi., pp. 170–196. Chapter iii. refers to 1829, the narrative then jumping to chapter vi., p. 196, and then to chapter vii., p. 224.

He first set foot on a glacier in 1822, when he crossed the Tschingelpass from Lauterbrunnen to the Gastern valley.[2] Of an ascent of the Titlis in 1826 we have no details,[3] nor of a journey in 1827, save that he was on the Sefinenfurgge and in the Roththal. The campaigns of 1828 and 1829 are fully described in the *Alpenreise*, the preface of which, dated Solothurn, 15 Juli 1830, announces a new expedition for 'the next week,' a few scattered notices of which exist. Details of the tour of 1831 we owe to Gottlieb Studer,[4] Hugi's companion from August 13 to September 1. Hugi himself describes his winter journey of January 1832.[5] He alludes, in 1843, to

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[1] *A.J.* xxx. 284, note 12.

[2] F. J. Hugi: *Die Gletscher und die erratischen Blöcke* (Soleure, 1843), p. 8.

[3] *Naturhist. Alpenreise*, p. 260.

[4] *Bergreisen* (18 vols. of MS. diaries by G. Studer, preserved in the library of the Bernese section, S.A.C.), vol. iv. pp. 1–95.

[5] *Winterreise in das Eismeer*, pp. 17–56.

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an experience of thirteen years of the glaciers since 1829,[6] but after 1832 we only know of a visit to the Unteraar Glacier in 1836.[7]

These expeditions were carefully planned, and the chapter in the *Alpenreise* describing the outfit of his large caravans is instructive and even amusing. The preparations of the campaigns of 1828, 1829, and 1832 must have caused him much trouble and expense, and compared with the same chapters in Meyer's or Rohrdorf's books the progress, in quantity as well as in quality, of scientific instruments is evident. His equipment included cooking apparatus, blue spectacles, veils, foot-irons, 500 ft. of soft, strong rope, an ice-axe,[8] and a host of paraphernalia.

Hugi's principal companions and guides for the years 1828 and 1829 have been given in Capt. Farrar's article on the Laueners, 'A.J.' xxx. 283–4. Of the guides, J. Leuthold, J. Zemt, Joh. Währen, Andreas Leuthold, J. Moor, P. Baumann gave the greatest satisfaction to their employer. The hunter Hans Lauener accompanied him in 1828 for fifty-two days; Zemt in 1829 for nearly as long.

We will now attempt to follow Hugi in his wanderings. On August 1, 1828, he left Soleure with his staff for Unterseen. They reached Lauterbrunnen next morning, and slept at the Stufensteinalp with the intention of exploring the contact between gneiss and limestone that is so striking a feature of the upper Roththal. They proposed also to examine the route to the Jungfrau, already tried by two of the guides, Peter Bischoff and Christian Lauener, and the passage from the upper Roththal to the Valais. It was not to be. Rain prevented an early start on August 3. In two parties they ascended the Roththal, Hugi with 'the lean old climber,' Peter Bischoff, exploring *en route* a cave in the rocks of the Bärenfluh, which, in my opinion, does not repay the trouble. (I visited it on July 24, 1881, and one of my guides, Peter Lauener, grandson of the above-named Christian, caught a chill from which he suffered during our traverse of the Jungfrau next day and for some time afterwards.[9])

They continued, in pouring rain, their exploration of the

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[6] *Die Gletscher*, etc., p. xv.

[7] *Ueber das Wesen der Gletscher*, pp. 79, 106.

[8] To judge by the frontispiece of the *Alpenreise*, it had the same form as described by Rohrdorf.

[9] See *S.A.C.J.* xvii. 280–2, and *A.J.* xxxi. 251.

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F. J. HUGI
1829

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HUGI'S PARTY ON THE ROTHHORNSATTEL IN 1829

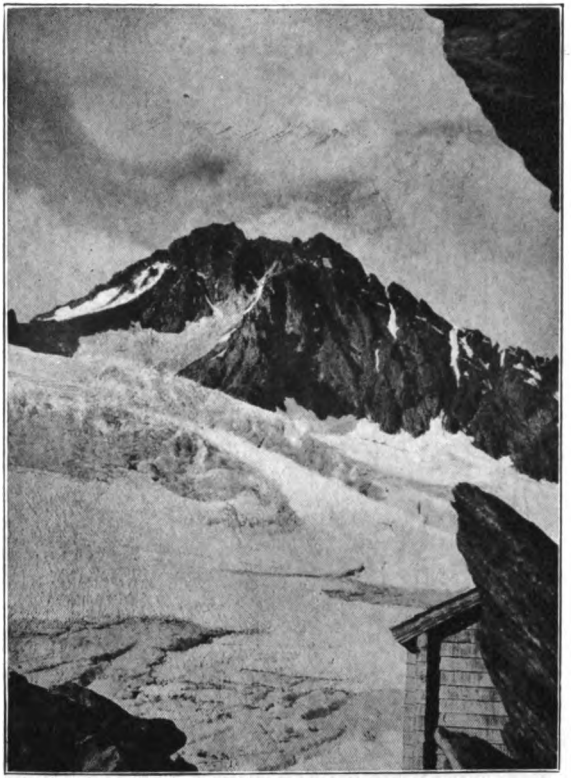


Photo V. A. Fynn]

FINSTERAARHORN

SHOWING THE TWO SUMMITS FROM THE FINSTERAARHORN HUT

Roththal, first on the right bank of the glacier, then along its centre line. Approaching the end of the valley, they saw that 'the northern and eastern walls meet in an angle in which an almost perpendicular narrow strip of glacier descends from behind the Jungfrau.' This seems to indicate the Roththalsattel couloir rather than the Lauithor. Hugi pushed on to the foot of the couloir, but falling snow forced a retreat to the Stufensteinalp. As the weather remained bad, they descended the next day, August 4, to Lauterbrunnen.

A reference to this attempt is found in Fenimore Cooper's 'Excursions in Switzerland' (vol. i. p. 95): 'A gentleman of Soleure got as high as eleven thousand feet the day before our arrival [August 4]. He was driven back by a snowstorm.'

Capt. Farrar has already discussed the attempts on the Jungfrau from the Roththal in two masterly articles,[10] but he has, in a minor point, been misled by Hugi's confused narrative. It may be convenient to insert a short summary here.

The first attempt was made by two unknown Lauterbrunnen men between 1790 and 1808.[11] 'The slab up to which they had got, and whence they did not consider it at all impossible to reach the summit, if provided with the needful to spend the night in the high glacier regions,' was visible from a point high up on the Tschingel Glacier and near the col. The description agrees best with the slabby triangle between my 1881 route and that of the 1885 party, as marked on the above plate.

Much in the same direction was an attempt by Peter Bischoff and Christian Lauener some time before 1828, for, as Hugi[12] says, 'Immediately to the entrance of the Roththal they bore to the left up the rocks.'

The same men, with seven others, were the guides of Messrs. Frederick Slade and Yeats Brown on August 20, 1828, when a determined attempt, as it would seem, by the Roththalsattel couloir, ended 'within a musket shot from the col.'

Of this remarkable expedition we possess two narratives—one in 'A.J.' v. 374, the other in Hugi's *Alpenreise*, pp. 26, 46, and 59–60. We will quote Hugi's words in order to clear up a mistake. Note that Hugi's 1830 book was a hasty

[10] 'The Roththal Face of the Jungfrau,' *A.J.* xxxi. 210 seq. 'The Führerbuch of Ulrich Lauener,' *A.J.* xxx. 277 seq.

[11] *A.J.* xxxi. 211, and the plate opposite p. 217.

[12] *Alpenreise*, p. 46.

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collection of lectures given between 1827 and 1830, and errors in dates occur. (1) In relating the incidents of his second visit to the Roththal, in August 1828, he refers to 'Places where, *some weeks later*, on an attempt made by two Englishmen to climb the Jungfrau, strength and courage forsook even the natives,' etc.[13] (2) In mentioning the daring attempt of Bischoff and Lauener, he indicates their route as 'up the rocks by which also *a few years earlier* two Englishmen hoped to ascend the Jungfrau.'[14] (3) He writes:[15] 'The ascent by that strip of glacier [the Roththalsattel couloir] seemed possible. *A fortnight later*, in favourable weather, two Englishmen tried it with my guides,' etc.

It is clear that (1) and (3) allude to the attempt on August 20, 1828, by Brown and Slade with the Laueners and Bischoff, and doubtless Hugi got his information from the guides. But what about (2)? Farrar suggests this attempt may be identical with the before-mentioned attempt of the two unknown Lauterbrunnen men before 1808.[16] But this is improbable. L.'s text suggests that the two guides were alone, and Englishmen travelling at a time when Switzerland was in the power of Napoleon must have been rare. Moreover, Hugi's words, 'a few years earlier' than 1828, do not indicate so early a time as 'not later than 1808.' I cannot help thinking that Hugi's 'two Englishmen' were in each case the same, viz. Brown and Slade.[17]

I am compelled to curtail the narrative of the less important part of Hugi's journey which followed.

He left Lauterbrunnen on August 5, and crossed the Little Scheidegg to Grindelwald in bad weather that lasted more or less the whole month, putting up at Wettach's inn.[18]

On the 8th, with five guides and porters, he slept at the Zäsenberg, and next morning started for the Strahlegg. 'Climbing with hands more than with feet' the steep wall,

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[13] *Alpenreise*, p. 26.
[14] *Ibid.* p. 46.
[15] *Ibid.* p. 59.
[16] *A.J.* xxxi. 211.

[17] See Fenimore Cooper's *Excursions*, vol. i. p. 95: 'Several parties of English *amateurs* have attempted to ascend [the Jungfrau]; but they do little more than follow where the guides lead, and publish magnificent books afterwards.'

[18] Probably the 'Bär,' as in 1824, and again in 1832, a Samuel Blatter is mentioned as host of the Aigle Noir. Neither in Coolidge's *Swiss Travel*, p. 209, nor in Wäber's 'Zur Geschichte des Fremdenverkehrs im engeren Berner Oberland' (*S.A.C.J.* xxxix.) is Wettach mentioned.

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they reached at last the height of the Strahlegg. In vain they tried to descend to the Strahleggfirn. The snow was in a dangerous condition, so they had to retreat, and reached the Zäsenberg in the dark, wet through. The next morning, August 10, Hugi descended to Grindelwald, and ascended the Männlichen and the Tschuggen on the 11th. On August 12 he crossed the Great Scheidegg to Rosenlaui, finding good quarters at Oesch's inn there.[19]

On August 13 Hugi, with Lauener and the chamois-hunter, Melchior Keller, crossed the Urbachsattel. They had intended to cross by the then unexplored Rosenegg to the Gauli or Unteraar, but were driven back at the foot of the Dossenhorn by falling stones. So they redescended the Rosenlaui Glacier, turned into a side valley, and gained the Weit-, or Urbach-sattel, by 2 P.M., reaching Hof the same evening.

'Föhn' and rain hindered excursions in the neighbourhood of Innertkirchen, so Hugi ascended to the Grimsel. The day after his arrival at Leuthold's hospitable house, he ascended the Siedelhorn with Lauener. The same day the other guides arrived from Innertkirchen and Guttannen, and with them, eight men in all, Hugi on August 18 started for the Finster-aarhorn.

Of his seven 'Steiger' Hugi mentions six by name—viz. Hans Lauener, Arnold Abbühl, Jakob Leuthold, Andreas Leuthold, Johann Moor, and Arnold Dändler. Of the Lauener and Abbühl I have already spoken. I am indebted to Pastor Lindenmeyer of Guttannen for particulars of the Leutholds.

The family hails from Unterstock, in the commune of Innertkirchen, but a branch settled at Im Boden about 1770, about which time the grandfather of our Jakob, viz. Johann, married Margaretha Bossli of that village. This Johann was for some time intendant of the Grimsel hospice, as was his son Jakob (baptised October 24, 1776; buried December 3, 1844). Jakob married on October 16, 1801, Regina, daughter of Kaspar Egger and Margaretha Abbühl (baptised September 25, 1778; died February 26, 1855; probably an elder sister of Arnold Abbühl of Finsteraarhorn fame). They

[19] Probably the Capricorn. It is interesting to hear that Hugi was satisfied with Seiler's at Münster, Bertha's at Obergestelen, Müller's at Hospenthal, and especially with the hospitality of Leuthold at the Grimsel. But he complains bitterly of the roughness, incivility, and extortion at the Sauvage at Meiringen, so next time went to the more friendly Bär.

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had five daughters, the eldest of whom, Margaretha, married in December 1827 Peter Zybach, the well-known intendant of the Grimsel hospice ; and two sons, Jakob, called ' der Herrenführer ' (baptised September 13, 1807), subsequently celebrated for his ascent of the Finsteraarhorn ;[20] and Kaspar (born 1820), drowned in infancy. Jakob Leuthold married twice—first, in 1823, Barbara Rueff of Meiringen, divorced in 1829 ; and secondly, in 1831, Anna Inäbnit of Grindelwald (born 1808 ; died 1877), who survived him many years. They had five sons, none of whom seem to have become guides, and three daughters. By marriage, Leuthold's family became related to the Laueners of Lauterbrunnen (1858) and the von Bergen of Willigen (1877). Leuthold died on August 16, 1843, at his home, ' An der Lehn,' im Boden, near Guttannen, ' from typhoid fever with hemorrhage,' as the register gives it.

Andreas Leuthold was born at Innertkirchen on April 15, 1792, and was killed while chamois-hunting on February 25, 1846. He married on March 14, 1822, Katharina Abplanalp, and left two daughters. He was brother of Jakob Leuthold, senior (1776–1844), and, like his nephew, a guide of some repute.

Johann Moor belonged to Obermaad, near Gadmen. Arnold Dändler (*recte* Tännler) lived at Schwendi im Boden, near Guttannen, so he was a neighbour of Jakob Leuthold, of Finsteraarhorn fame.

On August 19 Hugi's party went by the Kessithurm and the Bärenegg, reached the Oberaarjoch at 3 P.M., and crossing the Studerfirn gained the Rothhornsattel at 6 P.M., just as a snowstorm came on, where they found traces of the Meyers' bivouacs of 1812. It gave Hugi, seconded by Jakob Leuthold, some trouble to persuade the men to remain and construct a stone-hut.[21] Next morning the weather mended, and Hugi decided to reconnoitre the S.W. side of the peak. They descended to the Fiescherfirn and mounted it[22] in the direction

[20] *A.J.* xxvii. 263 seq., with portrait of Leuthold.

[21] See the frontispiece of Hugi's *Alpenreise.*

[22] It was here that Hugi questioned Abbühl about his line of descent on August 16, 1812, and about the position of the Finsteraarhorn. Now, seen from this position the top of the Finsteraarhorn, although somewhat masked by the ' minor summit,' is quite distinct (see photograph in *S.A.C.J.* xlii. p. 359). So when Abbühl, standing near P. 3270, pointed to the Finsteraarhorn as lying behind and above a hanging glacier that descended from the main S.E. arête, he was quite right. But Hugi, prejudiced by the absurd statement of Zschokke that the guides

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of a snow ridge that seemed to connect the Finsteraarhorn with the 'Walcherhörner,' as Hugi calls the whole range,

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of 1812 started from the Oberaarhorn to climb the Finsteraarhorn, ridiculed his guide's perhaps hesitating indications, and proceeded in a direction to which Abbühl could not possibly object, since the 1812 party had, when it was too late, realised that it presented a much easier way to the summit.

I do not accept two other of Capt. Farrar's criticisms of Abbühl. One is his alleged confession that he never reached the actual top. Hugi gives it in two forms. In 1830, he says (*Alpenreise*, p. 172): 'When we reached at last the said height (which I interpret to be the Hugisattel), he withdrew his pretension—(*er wollte das Finsteraarhorn nicht mehr erstiegen haben*).' In 1831 Hugi is more precise (see *S.A.C.J.* xxvii. 385, and *A.J.* xxvii. 267): 'He declared repeatedly that he had made a mistake sixteen years ago in respect to the highest point, and that he had not ascended the Finsteraarhorn.' Now, one cannot help thinking that Hugi laid stress on this, to say the least, questionable retraction, because Dr. R. Meyer, in his reply, proposed to bring evidence to the contrary. I have in a previous article given one reason why that evidence was not published till 1852. The other may be this: When Dr. Meyer, on January 6, 1831, published a note in the *Aufrichtige und wohlerfahrene Schweizerbote* to the effect that he was preparing a new issue of Zschokke's account of 1813, based on the MSS. and corroborated by testimony for the real ascent, he was surely not aware that, out of his three witnesses, two, Volker and Abbühl, were dead. When he discovered this, and at the same time realised by Hugi's answer in the number of January 13, that his own credibility was not contested, he may have dropped the matter from indifference to the reputation of a dead guide, but surely not 'in sheer despair of ever arriving at the truth,' as Capt. Farrar thinks. Doubtless Dr. Meyer remained firm in his belief of his guides' ascent to his death.

The other point on which Capt. Farrar lays stress is that Abbühl in 1828 equally failed to convince the other guides, some of them his fellow-servants of the Grimselwirth while the Leutholds and he lived in the same village. Now, in 1828 the real question was not whether the ascent by the S.E. arête was feasible but whether the N.W. arête offered a better route. The decision was not left to the guides. As Jakob Leuthold put it, Hugi had to issue the order, and they would obey as best they could. Moreover, Abbühl outranked by age, position, and fame the others, and his relationship to the Leutholds surely prevented their expressing doubts of him even if they had any. The whole party was also demoralised by the previous bad night and the evident indecision of Hugi's plans. Moreover, the bad terms on which Abbühl was with Hugi since the start prejudiced the expedition.

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including the Agassizhorn and the Grindelwald Fiescherhörner. It seemed impossible to gain the summit by the rocky cliffs on their right, so a circuitous way was chosen which brought them to the frontier ridge between the Fiescher- and the Finsteraarhorn glaciers. They gained it probably at the spot named, since 1862, Hugisattel.

Hugi, with the four best men, attempted to follow the N.W. arête, but a furious wind, severe cold, and the breaking of a cornice by which Hugi and Tännler nearly lost their lives, brought the party to a standstill, 'when they were only 200 ft. distant from the top.'[23] They returned the same way to the Rothhornsattel, hurried in bad weather over the Oberaarjoch to the Oberaarhut, reached at nightfall. Towards noon of August 21 they regained the Grimsel, where bad weather kept them for some days.

On August 25 he crossed with Lauener the Grimsel to the Valais. On August 27 he ascended with Lauener and some porters from Laax by the 'Mörileralp' to the ridge dividing it from the Aletsch glacier, crossed the Elsilücke to the glacier and the Aletsch lake, intending 'to penetrate into the glacier region between the Jungfrau and the Finsteraarhorn.' But the incapacity of his porters and bad weather obliged him, after some excursions, to redescend to Laax. Thence he made two excursions—one by Grengiols and the 'Mehlfluh' towards the Bortelhorn, the other by Aernen to Binn, and from there by Heilig Kreuz and the Langthal 'to the highest crest of the Pennine Alps.' On this occasion he was accompanied by three men, all ignorant of the region, Hans Lauener from Lauterbrunnen, and two porters from Laax. He seems to have gone straight up from Heilig Kreuz by the Kriegalp valley to the Kriegalppass, followed thence the frontier ridge in a N. direction, keeping on the Swiss side under the Güschihorn and the Cherbadung and crossing the Güschi glacier, the Wannen glacier, and the ice-field (unnamed in S. map) between the Fleschenhorn and the Schwarzhorn. Hence he found his way down to the Furggelti and by it to the Hockboden or the Maniboden, and so to Giessen, where he passed the night. The next three days he passed in the Binnthal, engaging the 'crystal hunter,' Franz Weltscher, who gave every satisfac-

[23] Hugi no doubt underrates the distance. The difference is 186 mètres, and the incident must have taken place not far above the Hugisattel, as only in the lower part of the arête do cornices occur.

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tion. With him Hugi mounted again twice more 'by the rocky mountains directly to the crest of the Alps.' He regained the Rhone valley, and went up it to Münster, visiting on August 31 the Münster glacier. On September 1 he went up the Egginenthal to the foot of the Griespass and over the Nufenenpass to Airolo; and on September 2, over the Gotthard to Hospenthal. He and Lauener then made geological excursions to the St. Anna glacier, the Unteralp, the Wyttenwasser glacier, the Lucendro lake, and, on September 4, the Bätzberg. They crossed, on September 6, the Sustenpass from Wassen to Gadmen. Probably still with Lauener, he visited the Wendenthal, 'between the Titlis and the Urazhörner,' ascended with great risk the rocks of the Titlis towards the Titlisjoch, and visited the Wenden glacier. He next went down to Hasli im Grund, whence his former fellow travellers, the men of the 'Spittler,' on September 8, conducted him in triumph on horseback to the Grimsel. With the Count v. Paar from Vienna, he made on September 9 and 10, excursions to the Rhone- and the Unteraar glaciers. They then went down to Meiringen, lodging at the Bär. Hugi returned to Soleure.

As 1828 was evidently a record year for the guides and porters in the Oberland, I have drawn up a sort of schedule of their doings. Then, as now, one may distinguish the Lauterbrunnen men, the Grindelwalders, and the Hasli men. The wages were the same for guides and porters—*i.e.* 4 (old) francs if the guide fed himself, 2 (old) francs if the traveller provided for him.[24] Evidently the latter method was adopted by Hugi and Rohrdorf, and probably by Brown and Slade. Two old francs are equivalent to 2 francs 90 centimes, present Swiss money, but the purchasing power of money in 1828, compared with 1913 (to say nothing of war-time), was double or more. Our list will also show what the rapid development of guidecraft meant for the respective centres on one hand, and for the advancement of mountaineering on the other.

A. Lauterbrunnen Men.

Peter Bischoff.—August 2–4, with Hugi: Roththal; August 5–7, with Rohrdorf: Kalli; August 20–22, with Brown

[24] Wyss: *Reise in das Berneroberland*, vol. i. p. 101. From Fenimore Cooper (*Excursions in Switzerland*, vol. ii. p. 729) we learn that 'Six French francs (= 4 old Swiss francs) was the established price for a guide in Switzerland, he paying his own expenses.'

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and Slade: attempt on Jungfrau; 9 days' service; wages about 27 francs and keep.

Hans Lauener, the chamois-hunter.—August 2 to September 20, with Hugi: Roththal, Strahlegg (not traversed), Urbachsattel, Siedelhorn, Oberaarjoch (twice), Rothhornsattel (twice), Hugisattel, Elsilücke, Kriegalppass (from N. only), Münster glacier, Nufenenpass, St. Anna glacier, Unteralp, Wyttenwasser glacier, Bätzberg, Sustenpass; 52 days' service; wages about 168 francs and keep.

Johann Lauener, the guide.—August 2–4, with Hugi: Roththal; August 20–22, with Brown and Slade: attempt on Jungfrau; 7 days' service; wages about 18 francs, etc.

Christian Lauener.—August 2–4, with Hugi: Roththal; August 20–22, with Brown and Slade: attempt on Jungfrau; 6 days' service; wages about 9 francs, etc.

Gertsch, jun.—August 20–22, with Brown and Slade: attempt on Jungfrau; 3 days' service; wages about 9 francs, etc.

B. Grindelwalders.

Christian Roth.—August 5–9, with Rohrdorf: Kalli and journey to Berne and back; August 19–29: Mönchjoch (twice), Sattelknopf; September 8–11, with six others: Mönchjoch (twice), Jungfrau (to Roththalsattel only); 20 days' service; wages about 48 francs plus 21 francs from the Government.

Ulrich Wittwer.—August 21–29, with Rohrdorf: Mönchjoch (twice), Roththalsattel; September 8–11, with six others: Mönchjoch (twice), Jungfrau; 13 days' service; wages about 27 francs plus 21 francs, etc.

Peter Moser.—August 21–29, with Rohrdorf: Mönchjoch (twice), Roththalsattel; September 8–11, with six others: Mönchjoch (twice), Jungfrau; 13 days' service; wages about 27 francs plus 21 francs, etc.

Peter Baumann.—August 9–12, with Hugi: Strahlegg (not traversed); August 21–29, with Rohrdorf: Mönchjoch (twice), Sattelknopf, Roththalsattel; September 8–11, with six others: Mönchjoch (twice), Jungfrau; 17 days' service; wages about 39 francs plus 21 francs, etc.

Hildebrand Burgener.—August 9–12, with Hugi: Strahlegg (not traversed); August 21–29, with Rohrdorf: Mönchjoch (twice), Jungfrau; 17 days' service; wages about 39 francs plus 21 francs, etc.

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Peter Roth.—August 9–12, with Hugi: Strahlegg (not traversed); August 21–29, with Rohrdorf: Mönchjoch (twice), Roththalsattel; September 8–11, with six others: Mönchjoch (twice), Jungfrau; 17 days' service; wages about 39 francs plus 21 francs, etc.

Christian Baumann.—August 21–29, with Rohrdorf: Mönchjoch (twice); September 8–11, with six others: Mönchjoch (twice), Jungfrau; 13 days' service; wages about 27 francs plus 21 francs, etc.

Hans Baumann and *Peter Burgener.*—Herds at the Zäsenberg pastures. August 26–29, with Rohrdorf: Mönchjoch (twice); 4 days' service; wages about 12 francs, etc.

Christian Schlunegger, Jakob Grüneisen, Hans Bohren, Peter Burgener, Christian Bernhard.—August 21–26, with Rohrdorf: Stieregghut, Kalli, Eigerhöhle, etc.; 6 days' service; wages about 18 francs, etc.

C. Hasli Men.

Melchior Keller, chamois-hunter.—August 16, with Hugi: from Rosenlaui by the Urbachsattel to Im Hof; 2 days' service; wages about 9 francs.

Arnold Abbühl, Jakob Leuthold, Andreas Leuthold, Johann Moor, Arnold Dändler (*Tännler*).—August 18–21, with Hugi: Oberaarjoch (twice), Rothhornsattel (twice), Hugisattel; 5 days' service; wages about 18 francs each.

I return now to Hugi's wanderings in 1829.

On July 16 he left Soleure, with Peter Gschwind and Joseph Zemt. At Lauterbrunnen his friend Jakob Roth and the guides Peter Baumann, Peter Bischoff, Hans Lauener (the chamois-hunter), Christian Lauener (his brother), and Johann Lauener (the guide) joined the party. They started early on the 18th, and at 1 P.M. reached the entrance of the Roththal.[25] As the weather was fine, they proceeded up the valley and built a stone hut.[26] Hugi, with Peter Baumann and another guide, meantime went on to reconnoitre. His topographical description is, as usual, more copious than clear, but by what I understand him to say about the contact lines of granite, gneiss, and limestone, and from what he states he saw, I incline to think they ascended to the so-called Inner

[25] See Plate, *A.J.* xxx. opp. p. 284.

[26] The spot may be in the neighbourhood of the old S.A.C. hut. The building is reproduced in *A.J.* xxx. opp. p. 285.

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or S.W. arête of the great splayed buttress that makes so great a show from the Ober Steinberg,[27] followed it for some time towards the Hochfirn, then traversed horizontally to the outer or W. arête forming the S. bank of the Silberlauitobel, descended this for some time, and regained the entrance of the Roththal at nightfall. If the other guide was Peter Bischoff or Christian Lauener, the party covered ground familiar to him from a former expedition.

After a comfortable night in the well-covered and tightly-closed hut, Hugi, with the guides, went to the upper valley, whence in 1828 he had intended to cross to the Valais. But the guides were reluctant, Baumann asserting that in this direction they could neither reach the Jungfrau nor descend to the Aletsch Glacier. With some trouble the party gained by a hanging 'firn' the first rocks, but the work of cutting steps in the hard snow of the couloir was so tedious, and the Lauterbrunnen men showed so little zeal, that Hugi was forced to abandon the enterprise and descend to the Stufensteinalp. They had overtopped their cabane by only 100 m. One cannot help thinking that the rivalry between the Lauterbrunnen and Grindelwald men contributed much to the failure of the expedition.

On July 20 Hugi descended to Trachsellauenen and remounted thence on the right bank of the Lütschine by the Hohenalp (which he mentions), the Breitlauenenalp, and the Tanzhubel, to the Oberhornalp, and thence went down to the Ober Steinberg. It seemed to him that a passage to the Valais would be possible by the Breithorn Glacier [the Schmadrijoch], while the ascent over the much-crevassed glacier between the Breithorn and the Tschingelhorn [the Wetterlücke], or the attack on the latter by its rock face, was apparently hopeless. Bad weather on the following day, July 21, prevented all real attempt. So the party descended to Lauterbrunnen. As the weather mended on July 22, Hugi remounted to the Ober Steinberg. To gain these huts he took a roundabout route, ascending first the Sefinen glen to the 'Kirchbalm,' which he visited. Thence, with Peter Baumann alone, as the Lauterbrunnen men preferred to go round by Stechelberg and Trachsellauenen, Hugi ascended to the 'Steinengrat,' whose height he reached probably at P. 2826. From here he saw the Ober Steinberg, 'below in the nebulous depth.' But they failed to reach it directly by

[27] See Plate, *A.J.* xxxi. opp. p. 217.

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descending in a southerly direction. So they went eastward over loose stones and débris (here Hugi sprained his ankle), round the Ellstab, and descended by a gap he calls Busetjoch [28] to the Ober Steinberg.

On the early morning of July 23 Hugi, with eight guides and porters, started for the Lötschenthal. They went by the Tschingeltritt—Hugi finds this passage not difficult 'for naturalists and capable guides,' but thinks a ladder and a few artificial steps would be useful for tourists—and 'rounding the Mutthorn by its left side,' reached the Petersgrat [29] at noon, although he spent much time on geological and meteorological observations and measured many angles for the sake of his map. Note also that he was nearly lame from his sprained ankle, remaining an invalid for six weeks, and his personal failure on the Finsteraarhorn may be mainly ascribed to that.

From the Petersgrat the party did not descend directly S. by the Telli glacier, but in order to find out whether a descent from the 'Breithornsattel' [the Wetterlücke] was possible if one succeeded in reaching it from the N., they rounded the Tschingelhorn till just below that col, and then descended, by the Ausser Thal probably, to the main valley and down to Kippel, where they arrived early in the afternoon. They had some trouble to find quarters in the curate's house for so many and so strange-looking men. The next day, July 24, Hugi remounted the Lötschen valley, conversing much *en route* with the natives—his description of their life and manner is the first given by any tourist—so that he reached the foot of the Langen glacier only at 3 P.M. They ascended it for about an hour, along the left bank apparently. Arrived on the last grass at the foot of a snow lane descending from the 'Nesthorn' [the Lötschenthaler Breithorn], they built a stone hut,[30] where they passed a very cold night, without fuel, the thermometer sinking to $-8°$ Réaumur.

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[28] The name is evidently taken from the Bussenalp just N. of the col. It may be the 'Schneeige Lücke' of the local tradition. For this gap and Hugi's denomination in that region, see *Climbers' Guide to the Bernese Oberland*, vol. i. pt. ii. pp. 49–54.

[29] I think the *Climbers' Guide* (*l.c.*, vol. i. pt. i. p. 50) is right in assuming that the name of this col derives from Peter Baumann, Hugi's leading guide on that expedition. At all events it was given by Hugi. (*Alpenreise*, p. 270.)

[30] The spot is marked with a □ on Hugi's map, and a view of the hut is given in *A.J.* xxx. opposite p. 285 (No. 3).

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Hugi had some trouble to induce the Lauterbrunnen men, on the chilly morning of July 25, to follow him into the unknown regions of the Aletsch Glacier, and more than once the comforting wine flask eased their weary tramp of five hours up to the Lötschenlücke. Leaving at 9.30 A.M., they reached the old bivouac place on the Grüneck about 1.30 P.M. All, and especially the leader, Peter Baumann, were drenched to the skin by wading through and occasionally falling in the abominable morass that blind admirers of scenery call the 'Place de la Concorde.' Hugi intended to remain here for at least eight days, but the weather got rapidly worse and the guides were unwilling to do the usual masonry work. So the party descended in four hours to the huts of the Märjelenalp. As these were already occupied by 'a hundred of half-naked Italian people,' engaged in digging a tunnel to drain the Märjelen lake into the Fiescher valley, they resolved to descend to Fiesch. So finishing their wine, and leaving the uneatable black bread bought at Kippel and other food to the herds of the Märjelenalp, they stumbled down, partly in pitch dark, over rock-cliffs and débris to Fiesch, where they arrived at 11 P.M., thoroughly exhausted after a twenty hours' journey. Even the 'giants' Baumann and Zemt had enough of it.

Sunday, July 26, was necessarily a day of rest, and as the weather remained uncertain, Hugi dismissed the six Oberlanders, who went back by the Grimsel to Grindelwald and Lauterbrunnen. He took advantage of his stay at Fiesch to search, without result of course, for traces of the old route from Fiesch to Grindelwald by the Walchergrat. More fruitful was his excursion in Val Formazza with Peter Gschwind and Joseph Zemt, which enabled him to draft a geological profile of the mountains from Formazza to Obergestelen, but he did no climbs worth recording.

On July 30 he went from Ulrichen by the Oberthal and the Ulricherjoch, and along the N. side of the Siedelhorn range to the Grimsel. Thence, on July 31, he started with eleven men, all well laden with signal poles, materials for the hut to be built on the Unteraar Glacier, and victuals for several days.

At noon they reached the selected place, on the moraine near the Abschwung, and while the engineer Walker and Peter Gschwind began to trace out a stationary line for their glacier measurement, indicated on Hugi's little map, the rest erected between two granitic boulders a regular stone hut

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that served as headquarters for the scientific staff of the party during the rest of the summer.[31] I cannot enter here on that part of Hugi's work. He confesses himself that the inconstant weather did not allow him to push the triangulation as far as he wished. After three days' stay at the hut Hugi returned to the Grimsel, leaving Walker and Gschwind to continue their work on the glacier.

On August 4 he left the Grimsel once more, with J. Leuthold, Joseph Zemt, Joh. Währen, J. Moor, Kaspar Nägeli, B. Horger, and Klaus Fahner.

Of Leuthold and Moor we have already spoken. Nägeli was, to judge from his name, a Guttannen man; so was Fahner. I would remind the reader once more [32] that it was not a Nägeli, but a Fahner, who, on August 14, 1799, led a detachment of French troops by a steep and difficult tract from Guttannen over the Nägelisgrätli (known under that name since 1760) into the rear of the Austrians, who held the position of the Grimselpass. It is curious that Hugi (p. 224) was unaware of this fact, although a Fahner and a Nägeli were in his service. I know nothing about Horger. Zemt was from Soleure—a strong, active, and trustworthy man. Währen belonged to St. Stephan, in the Upper Simmen valley. He was a son of Andreas Währen and Margaretha Schläppi, a stonemason by trade, residing at Innertkirchen.[33]

They crossed the Oberaarjoch, the Rothhornsattel, and descended to the Fiescherfirn, traversing thence along the S.W. face of the Finsteraarhorn. The only site for the usual hut [34] was an islet of débris in the snow, probably where now the Finsteraarhorn hut stands. Two of the porters, Horger and Fahner, proved utterly useless, and are immortalised by Hugi as prototypes of a since well-known specimen, who eat a lot, work little, drag the blankets off their sleeping comrades, and drink the wine during the night.

By six the hut was finished, and, as a snowstorm raged, they soon crept in and tried to sleep. Next morning, August 5, the cold was intense, and fresh snow rendered climbing impossible. On the Rothhornsattel they were caught in a dense mist, and Hugi managed, solely by aid of

[31] The hut is marked on both Hugi's maps and figured in *A.J.* xxx. opposite p. 285, as number 1.

[32] See *Climbers' Guide to the Bernese Oberland*, vol. ii. pt. i. p. 3.

[33] *A.J.* xxvii. 297.

[34] See *A.J.* xxx. opposite p. 285, under number 4.

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the compass, to find the Oberaarjoch, whence the party reached the Grimsel. The same evening the indefatigable Zemt started for the Unteraar Glacier to help Walker and Gschwind in the transport of the instruments.

After a rest of two days Walker and Gschwind returned to their work on the Unteraar Glacier. Hugi himself, on August 9, left the Grimsel at 9 A.M., with Jakob Leuthold, who persisted in joining the party, although ill, Moor, Währen, Zemt, and Nägeli. At 8 P.M. they were in their old gîte on the Rothhornsattel. They had a splendid evening with full moonlight. The old supply of fuel enabled them, for the first time in all Hugi's expeditions, to dry their shoes, stockings, and gaiters. After the meal Zemt and Leuthold washed and bandaged Hugi's swollen foot. Then they lay down on the stony floor, covered themselves with a great oil-cloth, and slept undisturbed.

Early on August 10 they started for the ascent of the Finsteraarhorn, taking with them only the necessary food, some instruments, and a pole 7 ft. long and as thick as a man's arm. With some trouble, as there was less snow and more ice than the previous year,[35] they reached the Hugisattel. Thence Hugi ascended in a north-westerly direction, till he could look down 'into a narrow snow valley bordered on the East by the Walchergrat, on the West by a lower range of cliffs [the Grünhörner], that descended from the Fieschergörner and ended as a small glen in the Fiescherfirn.' He thought that, if the legendary passage from the Valais to Grindelwald led, instead of over the Aletsch Glacier, over the Fiescher Glacier, which was more probable, it must have been by that particular valley. After some observations of that kind he returned to the Hugisattel, and the party now started to climb the Finsteraarhorn. With some difficulty they gained by steep snow patches 'a first and second step' of the arête. But to reach the foot of the final buttress, consisting of sheer rocks, Leuthold and Währen had to cut steps 'across an icy couloir that fell rapidly down' towards the W. probably. Much time was spent on that work, and meanwhile Hugi's swollen foot became quite benumbed. So when Leuthold returned to lead him over, the passage appeared too risky, as Hugi had not strength enough to plant his lame foot firmly on the ice. Moreover, Leuthold declared openly

[35] That is, to my mind, the real meaning of Hugi's (p. 209) perplexing phrase, 'Bei so tiefem Stande des Firns.'

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that, if Hugi slipped, he could not move to save him. An attempt to creep over in stockings failed ; nor could the guides help their employer with the rope. Neither of the others cared to pass that *mauvais pas.* So Hugi had to remain where he was,[36] perched on the edge of the arête, while Leuthold, with the cumbersome pole on his back, joined Währen on the other side of the couloir. The manner in which he did it would have caused Tyndall the same delight as Bennen's artifice on the arête of the Weisshorn in 1861. Hugi describes it as follows : ' He thrust his foot firmly into the first step, and *let his shoe be slightly frozen to the surface to which he clung,* then he drove with both hands his steel-pointed stick into the wall, held on it, and took a stride to the second step. When he was fast there, he drew out his stick,' and so on. Then both clambered speedily up the rocks and gained the top. There they built a pyramid of rough stones 7 ft. high, and planted on it a flag that was instantly seen from the Grimsel, and, later, from Berne and even Soleure. They found no trace of a previous ascent it seems ; but as the signal of 1812 was a simple pole, this might have vanished long ago. Leuthold and Währen left some things that had served for the flag—it consisted of iron rods screwed together and covered with a black waxcloth, which were found in 1842 by Sulger's guides. They went over the sharp crest of the summit that was free from snow and ice, towards the south, till they saw the region of their hut on the Rothhornsattel. Then they returned to Hugi and the others, somewhat agitated by their hazardous climb. Währen had even fainted twice while working at the signal. Before leaving the ' sattel '

[36] He calculated that he was 13,033 French ft. (about 4120 mètres) above the sea, and only 200 ft. below the top. Both figures are erroneous. The difference of height between the Hugi-sattel and the top is 186 m., and the spot where Hugi rested in 1829 is certainly not much higher than that where he turned back in 1828. His ' times ' also are confused. Once he says (p. 209) that he was on that spot at noon already ; then (p. 208) that he waited nearly two hours while Leuthold and Währen cut steps across the couloir ; further (p. 207), that the two were busy building a pyramid on the top for three hours. On Tables VI and VII he notes an observation made ' on the first step ' (12,606·2 ft. above the sea) at noon, and another ' on the second step ' (13,033·2 ft.) at 1 P.M. Now, as the two guides were back at Hugi's resting-place shortly after 4 P.M., we may reasonably allow them four hours for the ascent from the Hugisattel and the return to it.

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Hugi deposited in the rocks a thermometrograph enclosed in a bottle.

Then, having emptied their wine flasks, they began the descent. It was slow and difficult because of Hugi's condition, the softness of the snow and big crevasses. The party was roped, and when the leader Leuthold testing with his stick suspected the snow bridges, he crossed them on his stomach and pulled the others over with the rope. They reached their gîte by nightfall, but as bad weather was threatening they decided to go on to the Grimsel at once. Near the Oberaarjoch Hugi's foot was so badly swollen that he proposed that he and Zemt should seek shelter in the rocks of the Oberaarhorn, while the others descended to the Oberaaralp for help. Leuthold promptly took Hugi on his back, relieved from time to time by Währen and Zemt. They reached the Oberaaralp before midnight.

The next morning, August 11, Hugi, packed in a back-basket, was carried by Leuthold and Währen alternately down to the Grimsel. Eight days later, taking leave of his good comrades, he descended on horseback to Guttannen and Im Hof.

Alone with Zemt he made an excursion in the Urbach valley (August 18), and crossed the Brünig (on August 19) to Lungern and Stans; then to Wäggis and, on horseback once more, over the Rigi (August 21) to Goldau. Thence they went to Küssnacht and Lucerne.

Here Hugi engaged three porters, the brothers Franz, Johann, and Marx Huber from Kriens, to help Zemt with the heavy luggage. With four men and, as he thought, provisions for three days, he went on the evening of August 22 to Eigenthal, at the N. foot of the Pilatus. The next day they mounted by pastures and rough ground to the 'Kriesiloch,' at the foot of which they halted for lunch at 2 P.M. It is amusing to read of Hugi's experiences with worthless porters repeated once more. In two meals, one near the Kriesiloch, the other at the border of the marshy 'Lake of Pilatus,' the victuals were nearly consumed; in vain the Hubers tried to haul the big basket up the narrow Kriesiloch, till Zemt, who had gone ahead with Hugi, redescended, charged the whole load of eighty pounds on his broad shoulders, invited one man to ride on the load as extra weight, and remounted the Kriesiloch to the Tomlishorn, smoking his pipe! The party ascended the 'Esel,' the highest summit of the Pilatus. On the return to the Eigenthal the porters, in storm, mist, and rain, lost the

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way on their own mountain and arrived at Eigenthal towards midnight (August 23), while Hugi and Zemt, descending as best they could, came in two hours sooner.

From Lucerne Hugi went by the Entlibuch, Schangnau, and the Schallenberg to Thun. There he waited four days, intending to return by the Simmenthal to the mountains, but as the weather remained bad he returned to Soleure.

It is mostly the fault of Hugi himself if we know so little about his alpine doings in *1830*. He published no detailed account, and his isolated statements in later publications are vague and often disfigured by slips of the pen or faults of memory. For July and August Hugi planned a new expedition to the High Alps. He had provided himself with more scientific instruments than ever, and engaged the botanist Roth, the painter Disteli, and the engineer Walker as his staff. What became of the plan to survey a new portion of the glaciers of the Bernese Oberland and to make geological profiles like those in the *Alpenreise*, we do not know. The only climb we hear of was an ascent to the Mönchjoch. He describes it as follows:[37] 'In 1829 [*recte* 1828] some Grindelwalders went easily over the Walchergrat, but in 1830 the hanging névés and glaciers descending from that arête were so broken up in wild séracs that none of these men recognised the spot where they had been. So possibly no expedition was so troublesome and hazardous as that we were obstinate enough to carry through.' In the same year Hugi may have visited his hut on the Unteraar Glacier, but we have no certainty about the fact. On p. 106 of his 'Wesen der Gletscher' Hugi notes that he marked in 1830 an immense block on the moraine, near the Abschwung, and that he found the same in 1836, with the date still painted in oil on it, but several thousand feet lower down as a glacier table in the middle of the glacier. But on p. 79, where he seems to allude to the same block, he tells us that he reached it by way of the Gauli Glacier and the Ewigschneehorn in 1830. It is, however, certain that this visit was made in 1831, as we will see.

For *1831* an expedition in the glacier region near the Aletschhorn was planned, but at the last moment, for an unknown reason, the plans were altered. So, on Saturday, August 13,

[37] *Winterreise*, p. 47. At p. 54 he tells that he, in 1831, stood on the 'snow arête behind the Eiger'; but we shall see that the campaign of 1831 pervaded the regions of the Grimsel, the Furka, and the Gotthard, and ended at Lucerne.

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Gottlieb Studer, who had been invited in the spring to join Hugi, left Berne with Hugi, Zemt, and a new porter, Stadlin from Zug, and slept at Unterseen. On Sunday, August 14, they went by Interlaken, Brienz, and Meiringen to Im Hof, near Innertkirchen. There they engaged as guides Andreas Leuthold, uncle of Jakob, and Johannes Währen. Jakob Leuthold, who met them by chance coming from Meiringen, was bound for the Grimsel, but promised that he would meet them next day on the summit of the 'Aargrat,' *i.e.* the Gaulipass. When Hugi and Studer, with A. Leuthold, Währen, and Zemt, left the inn at Im Hof on the early morning of August 16, the weather was damp, and some showers fell during their march up the Urbach valley to the Urnenalp. Rain also accompanied them the next morning, August 17, over the Gauli Glacier and the Grünbergli to the col. They left the 'Happislümmelti'[38] (3127 m.), the lower of the two gaps that form the Gaulipass, to their left and steered for the higher one (3206 m.), next the foot of the Ewigschneehorn. They crossed the bergschrund, Leuthold leading, Währen bringing up the rear, the others holding to the rope with their right hands. On the col they listened in vain for the signal shots of Jakob Leuthold, who had supposed they would not come in such bad weather. Hugi and Studer did *not* ascend the Ewigschneehorn, which—so Studer says in his diary—they could have reached from the col in about an hour. They descended to the Lauteraar Glacier, passed the old and new 'Jäger Herberge' ('A.J.' xxxiii. 95, note 33), and visited near the Abschwung the hut erected by Hugi in 1829. It was already in ruins. Only some laths and heaps of rhododendron bushes remained to indicate the spot that was 504 ft. farther from the Abschwung than in 1829. In good time they reached the Grimsel. On August 17 Hugi reposed, while Studer and Zemt ascended the Siedelhorn. Leuthold and Währen were dismissed; Stadlin, who had taken the high road by Guttannen and the Handeck, arrived with the barometer. So on August 18 the four went by the Mayenwang and the Furka to Realp, where they stayed at the house of Father Brunner. Studer left Hugi on August 31 at Lucerne. Together they descended to Hospenthal, went up to the Gotthard and back, and down the Reuss valley to Amsteg and Altdorf. But while the others

[38] As for that name, see *Climbers' Guide to the Bernese Oberland*, vol. ii. p. 136.

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were engaged in geological studies which required no serious climbing, Studer was permitted to ascend, on August 22, with the innkeeper of the Gotthard, the Fibbia; on August 23, alone, the Winterberg or Piz Orsino, and on August 27, with Melchior Trösch, the Kleine Windgälle. So this campaign ended with greater advantage, from the mountaineering point of view, for the volunteer than for the leader. No doubt Studer was useful to his employer, collecting minerals and geological specimens in situations beyond the reach of Hugi.

In *1832* Hugi made something new in the record of mountaineering, viz. a winter expedition to the glaciers of Grindelwald. His idea was that the thick and durable covering of snow in the Alps might allow him to reach spots that had proved inaccessible in summer 'during the low state of the névés and glaciers.' The aim, to attain which he underwent great hardship and serious risk, not to speak of considerable expense, was in the first line scientific. It concerned questions of glaciology that had been raised by De Saussure, Charpentier, and others. I am not competent to judge those matters, so I shall confine myself to a mountaineering narrative.

At noon, on January 4, he arrived at Grindelwald with Zemt and the necessary instruments, after an adventurous journey in bitter cold. A few days were passed with experiments on the snouts of the Upper and Lower Grindelwald glaciers. Then, on January 8, after a 'tremendous' breakfast, a start was made, although the weather was threatening, with eight herdsmen and chamois-hunters and provisions for two or three weeks. He mentions Baumann, probably Peter, Burgener, and Roth 'der Felsenmann,' and describes the heartbreaking scenes of departure. All the guides had spikes of steel 2 inches long screwed in the heels of their shoes, and Hugi was only too glad to follow their example. Hugi [39] ridicules travellers and alpine writers who recommend foot-irons as absolutely indispensable. Hugi finds them, in summer, unnecessary on turf or grass, superfluous on glacier and 'firn,' as those are either granulous or soft, and decidedly dangerous on rocks. Good nailed shoes, not too heavy, are quite sufficient in his mind.

With enormous trouble and danger the vanguard of the caravan reached, at half-past three P.M., the place where Hugi

[39] *Ueber das Wesen der Gletscher und Winterreise in das Eismeer*, pp. 28–29.

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supposed the Stieregg hut to be. A prominent snow mound showed its position, but night appeared before they could manage to enter it from above. Here they remained thirteen days, continuing the experiments on the nature of the glaciers, their grain and structure, depth of the crevasses, etc., and making excursions. Three of these are worthy of record. On the fourth day of their stay at the hut, *i.e.* on January 12, Hugi with the three best guides set out for the Strahlegg, while two others were sent out towards the Walcherhörner to search for a cave or other shelter for the night. The others remained at the hut busy with household work and scientific observations. This time Hugi followed the right bank of the glacier beyond the Bänisegg along the foot of the Schreckhörner. They went fast in high spirits, because of the good wine they had with them, and reached the Strahlegg at noon. Once more Hugi persuaded himself that 'the best passage from Grindelwald to the Aar glaciers and the Grimsel goes over the snow lane on the Klein Lauteraarhorn,' *i.e.* the Strahleggpass (3351 m.) of recent guide-books and maps. Hugi did not try to descend to the Strahleggfirn, but 'hastened over towards the Walchergrat.' Behind the 'Grünenwang' they found their two comrades shivering and miserable. During the whole day they had in vain sought for the desired shelter. So the plan to explore the Walchergrat the next day in the direction of a col S. of the Klein Fiescherhorn, or between the two Fiescherhörner, was given up and retreat begun at once. It proved difficult and troublesome, as night had fallen and snow covered everything. Even Peter Baumann, 'the Gletscherhirt,' was unable to find the big boulder against which his hut was built. In the séracs caused by the junction of the Grindelwald-Fiescherfirn and the Lower Grindelwald glacier, they became so entangled that for a moment they thought of passing the night in a crevasse into which they descended with the help of the rope. But the cold was too intense. So they remounted to the surface and continued, roped, the wearisome and dangerous traverse till they reached towards midnight the Stieregg hut. Another day, on January 16 probably, Hugi made an attempt to reach the Mönchjoch, but the day proved too short, and wisely he contented himself with reaching the great plateau below the Bergli rocks. On January 18 Hugi travelled up and down the whole length of the Grindelwalder Eismeer. He seems to have ascended nearly to the Finsteraarjoch, but not to its top. On January 21, as the weather broke and 'föhn' set in, the party returned in

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great haste to Grindelwald, which they reached safely, going by the Bäregg as on the way up. The descent was even more risky than the ascent had been. Two days later he ascended the Faulhorn in frosty weather, but was blocked in the hut there for three days, because soft snow on the heights rendered an immediate return too dangerous. On the frosty morning of January 26 he descended to Grindelwald, and soon afterwards went home.

Later in the same year Hugi attempted to climb the Jungfrau. We possess only indirect accounts of this assault that ended at some distance below the Roththalsattel. Desor[40] and Forbes[41] tell us that in 1841, when their party slept at the Märjelenalp before their ascent on August 28, a man was despatched to the village of Fiesch to fetch a ladder that had served Hugi and Jakob Leuthold in 1832 and was left by them on the Jungfraufirn. It was found and brought down later by a peasant of Fiesch who, having repaired it, claimed it as his own property. It would seem that Hugi's party had come to that spot from Grindelwald over the Mönchjoch, and that the attempt was defeated by bad weather somewhere near the Roththalsattel. It is odd that Hugi never speaks of this expedition.

As stated, we know little of Hugi's alpine career after 1832, save that he returned to his hut on the Unteraar glacier in *1836*, and even later.

In conclusion, we will endeavour to say something about the literary merit of his two alpine books. Although Hugi was an enthusiastic climber and an educated writer, both are, judged from a modern standpoint, not so illuminative in form and style as the Meyers',[42] and even Rohrdorf's pamphlets. We learn less from Hugi than from the others of the technique and practice of our craft in those bygone times. While we get some idea of Hugi's scientific equipment, we are told little about his commissariat. We learn that broth, chocolate, and ham were in favour with the party, and that they did not despise a good supply of wine. Indeed, when Hugi started for the Finsteraarhorn the first time, he took for himself and his seven 'steiger' a barrel holding thirty litres and a

[40] *Excursions et séjours dans les glaciers et les hautes régions des Alpes* (1844), pp. 277–8.

[41] *Travels through the Alps*, new edition, edited by W. A. B. Coolidge (1900), pp. 440, 442–3.

[42] See Capt. Farrar's remark, *A.J.* xxvii. 295.

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couple of wine-bags filled with best Lacôte, reckoned to suffice for four days. Of course he also had spirits with him, and when, on January 8, 1832, Roth collapsed on the glacier below the Stieregg and refused to move, he was drenched with 'Kirschgeist' till he allowed himself to be led to the hut. It is a pity also that Hugi gives no details of the condition of himself and his men during their climbs. His general remark [43] that there was no difference of pulsation, respiration, bodily temperature, etc., in the observations noted at high or lower stations, save those caused by exertion, fatigue, and especially fright, is but poor compensation for the missing tables of such observations. As students of alpine history, we miss accurate details of Hugi's climbs and routes and, above all, better maps. The great map entitled 'Uebersicht der Gletscher zwischen Grindelwald, Wallis, Hasle und Lötsch' is chiefly based on that of Wyss of 1816, and repeats all its errors. The new items in Hugi's map are a few names, the site of his huts, and a contour line marking the boundaries of névé and glacier. The map of the 'Unteraargletscher mit seinen Verzweigungen' [44] is an extract from the greater and more detailed plan designed by Walker. It is based on a scheme of triangulation that was never finished nor issued, and was speedily deposed by Joh. Wild's survey of the Unteraar glacier while he was in Dollfus' service.

On the other side it is only fair to state that the geological chapters of Hugi's books are full of interesting and useful observations and notices, and show a veritable advance in our knowledge. Although his studies on the phenomena of glaciers are honest and trustworthy work, and his general theories met with sharp criticism from Charpentier, Agassiz, and Desor, and are not tenable in the light of modern knowledge, I think Professor Forbes does Hugi only justice when he says: [45] 'He points out the correct method of observation: and although his work contains no accurate measures, he was perhaps the first who, by observing the position of a remarkable block upon the Unteraar Glacier, indicated how such observations might be usefully made, instead of trusting (as appears to have been the former practice) to the vague report of the peasantry.' And let us not forget that Hugi, after some hesitation, guided the discussion of the 'old route

[43] *Alpenreise*, p. 218.
[44] See Forbes' *Travels through the Alps*, new edition (1900), p. 437.
[45] *Travels through the Alps*, new edition (1900), p. 121.

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over the Walchergrat' into the right channel by his discovery that the entries in the parish registers of Grindelwald were dead against the tradition of a regular passage used by Valaisan wedding and christening parties[46] in the sixteenth century. And if in his early studies Hugi was driven to incorrect ideas as to the legendary passage and hence searched for a chapel of St. Petronella in the Fiescher valley, it was mainly because of the incorrect reading of the inscription on the old church bell of Grindelwald supplied to him, viz.:

SANCTA-PETRONELLA-ORA-PRO-NOBIS. 1044.

It is worth noting that in 1879 Gottlieb Studer, seconded by Friedrich Bürki, of whose alpine merits I will treat later, proved that this bell,[47] which was destroyed in the great fire of 1892, *bore no date.*

Hugi's alpine career began in 1822 and ended about 1842. It was, we may say, an honourable if not a splendid one.

NOTE.

By J. P. FARRAR.

Dr. Dübi will, I trust, permit the following remarks on his note 22. They are made with all the respect that is due to his acknowledged position as an able and acute Alpine critic.

Par. 1, line 14. Meyer's own words (par. 17 of my article 'A.J.' xxvii.) are:

> 'Auf dieser Seite, wo wir herabgekommen waren (westwärts) ist der Berg ganz ohne Schwierigkeit zu erklimmen,'

which surely only refer to the way they had just descended and not to a route *far away out of sight,* as no part of the N.W. arête would be visible.

Par. 2. We have Hugi's direct statement that Abbühl admitted that he had not reached the highest point in 1812. I showed in my article in 'A.J.' xxvii. the improbability of his having done so.

It should be noted that Dr. Meyer's words (on January 6, 1831) are: 'Hoffentlich wird es mir bis dahin [by next summer] noch möglich sein, Zeugnisse für die Ersteigung des Finsteraarhorns

[46] In his masterly article, 'Zur Frage des alten Passes zwischen Grindelwald und Wallis,' in *S.A.C.J.* xxvii. pp. 253–274, my late friend, A. Wäber, does not mention this special merit of Hugi. So I make good this oblivion.

[47] *S.A.C.J.* xv. pp. 512–5.

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vorzulegen.'[48] (It is to be hoped that by next summer it may be possible for me to present evidence of the ascent, &c.)

Dr. Dübi is able to point out that when Dr. Meyer wrote these words he may not have been aware that Abbühl had been killed on March 3, 1830. But no further 'evidence,' as we understand that word, was, in any circumstances, possible, as Dr. Meyer, on reflection, probably saw.

Par. 3. I cannot agree that 'in 1828 the real question was not whether the ascent by the S.E. arête was feasible but whether the N.W. arête offered a better route.' My view is that Hugi proposed to repeat the 1812 route, and for that very purpose took with him Abbühl, who led on that occasion. When Abbühl got, as I hold, to the Frühstücksplatz and saw the two distinct summits[49] he, according to Hugi, realised his error in thinking that in 1812 he had reached the *higher* summit. Dr. Dübi thinks he only realised this when he reached the so-called Hugisattel; but from that point he could not distinguish the two summits at all and would gain no fresh knowledge.

I have always abstained from accusing Abbühl and his companions of any intentional deception, but it should be noted that when Abbühl and Huber, after their reputed ascent of the higher summit of the Finsteraarhorn on August 15, reached Grindelwald on September 3[50] they, 'who a fortnight ago were . . . on the summit of the Jungfrau, told us that the ascent is easy and without danger. But to climb the Finsteraarhorn is, so they say, a very risky undertaking.'

This is not the kind of statement a reporter could invent or get hold of by misunderstanding: it obviously suggests a certain willingness of the two guides to accept an unearned honour, since the ascent of the Jungfrau had been made by the two Valaisans Volker and Bortes *and they themselves had no personal knowledge of the ascent.*

With the utmost respect for the great authority of Dr. Dübi, I venture to adhere to the opinion as to the *probable* course of events, expressed in my article in volume xxvii. of this Journal.

Mont Dolent from the Glacier d'Argentière and the Col des Grandes Jorasses.

By Raymond Bicknell.

(Read before the Alpine Club, February 1, 1921.)

In his valedictory address at the end of 1919 our retiring President expressed views on the subject of guideless climbing in the high Alps which, to those of us who indulge in that most fascinating branch of our sport, were more

[48] *S.A.C.J.* xxvii. 385.

[49] See the picture with this paper, where they look equally high.

[50] *A.J.* xxxiii. 97.

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encouraging than anything which had ever before fallen from the lips of authority in this room. Strengthened thereby, Shadbolt, Porter, and I left London on the third day of the following July to see what we could do in the way of putting precept into practice.

We began with a brief but strenuous campaign in Dauphiné, *terra incognita* to all three of us. A few hours after reaching La Grave we went to the Chalet de l'Alpe, and the next day ascended the Pic de Neige Cordier and crossed the Col Emil Pic to the Glacier Blanc. From our pass it had been our intention to descend to the Val Louise and to reach La Bérarde the next day by means of another modest climb. But right in front of us was the great north face of the Écrins, a brilliant and alluring vision of shining ice and snow under a cloudless blue sky. I suggested that it would be foolish to descend thousands of feet into a valley with so great a prize close above our heads; in a moment our good home-made resolutions as to a gentle beginning of well-ordered training walks were thrown to the winds, my suggestion was enthusiastically accepted, and instead of going to the Val Louise we slept at the Ernest Carron hut on the Glacier Blanc. By seven o'clock the next morning, with the help of a half-waned moon, crampons, and good snow, we were on the top of our peak, having accomplished the first ascent of the season.

For me this day was chiefly remarkable in that it showed at how low an altitude it is possible to suffer from every known symptom of mountain sickness, given a sufficient lack of previous training. I entirely disagree with the frequently expressed opinion that such ills are wrongly described as mountain sickness, being merely the result of insufficient training, for in my first few days in the Alps I invariably suffer acutely above 12,000 ft., whereas in Norway, where I have frequently made long and trying ascents immediately after landing, I have never noticed any traces of similar troubles.

We descended to La Bérarde by the Col des Écrins, and after resting there for a day we went to the Promontoire hut. Before we left the hut the next morning a gentle snowfall had dashed all our hope of an ascent of the Meije; before we had reached the Brèche de la Meije the state of the snow had brought us to the unanimous opinion that our amended plan of an ascent of the Rateau must be abandoned, and in the end we were thankful to have got safely over the loose snow on both sides of the Brèche. At La Grave we learned that the Meije had not yet been ascended. Local opinion

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was not very hopeful as to the possibility of a traverse so early in the season, but after two days of unbroken sunshine we thought otherwise and went back to the Promontoire.

In the last number of the ALPINE JOURNAL Harold Raeburn has expressed the opinion that 'for a party of three amateurs the Meije traverse will, unless they already know the mountain or have extremely favourable conditions, almost certainly result in a night out.' We found the mountain in a condition which could not have been described as extremely favourable, and I am glad to be able to do something to controvert Raeburn's gloomy forecast. We had no moon to help us, so could not leave the hut before dawn. Our time to the top of the Grand Pic was about the same as that given in the climbers' guide. So far we had little to complain of in the condition of the mountain. There were few places where we were not all climbing together, our only difficulty being in finding the way, and we afterwards regretted that we had not gone unroped up to the foot of the Glacier Carré. Beyond the Grand Pic there was an entire change. The northern slopes of the mountain were thickly plastered with ice covered with half-melted snow. The descent to the Brèche Zsigmondy required extreme caution, and occupied over two hours of continuous work. We had read of iron pegs and hooks. If they were there they were buried under the ice. The crack leading out of the Brèche was easy, but the slope leading up to the ridge immediately above it—a vile mixture of rotten rock, ice, and insecure snow—was very much the reverse. Doubts as to the soundness of the fixed rope caused us to abandon its help, and I thought the place distinctly difficult and for the leader a little perilous. The journey to the Pic Central went easily, but part of the descent to the gap to its east was almost as troublesome as that to the Brèche Zsigmondy. There followed a slow and anxious descent of the steep slope to the Col des Corridors, over snow so powdery that the wind whirled it into our faces in blinding clouds. Sir Claud Schuster may be interested to know that here we joyfully adopted the tactics for which he apologises in the third chapter of 'Peaks and Pleasant Pastures,' getting safely down the most doubtful part of the slope with the help of 120 ft. of light line doubled through a loop of rope, which in 1920, as in 1908, adorned the lowest patch of rock.

The net result of all this was that we reached the hut at the Rocher de l'Aigle with nearly three hours of daylight in hand. Thereafter, in spite of an unsuccessful attempt to

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follow the wrong line on the Tabuchet Glacier and at a later period of the evening an involuntary, dark, and exasperating excursion into a jungle of scrubby bushes on a slope of slimy shale, we ultimately dined in La Grave. The next morning we suffered the terrors of a crossing of the Col du Galibier in a motor char-à-banc driven at a reckless speed down a rough, narrow, steep, and winding road, and we then took train for the northern side of the chain of Mt. Blanc, where we purposed to follow less trodden paths than in the Dauphiné.

My interest in Mt. Dolent dates from the reading of 'Scrambles in the Alps,' when I was a child. It was strengthened by the belief that three countries met on a snow pyramid at its top. Later came modern knowledge with its matter-of-fact disclosure that three countries do not meet on the top; but by this time I had seen the great rock wall which bars the extreme head of the Argentière Glacier and had been seized by a desire to climb over it into Italy. For a time that grim portal, the Col du Mt. Dolent, appeared to be the only direct road but before the war I had become aware of the possibility of a traverse of Mt. Dolent itself and in 1914 we had hoped to include it in a campaign, which was cut short after we had spent one day above the snow-line. From this time onwards the expedition kept a constantly high place in my ever-varying list of things to be enjoyed when the war should come to an end. So it was that when we reached Argentière this year it occupied the first place on our programme, and the day after our arrival we proceeded to the hut on the Jardin d'Argentière.

Mt. Dolent is roughly a pyramid, the four faces being divided by four sharp and well-defined ridges. The S.E. ridge running up from the Petit Col Ferret is the Italian-Swiss frontier, and divides the Italian Glacier de Pré de Bar from the Swiss Glacier du Mt. Dolent. The E. ridge, which is wholly Swiss, divides the Glacier du M. Dolent from the Glacier de La Neuvaz. At the meeting of these two ridges is the highest point, 3833 metres, to the north of which there is a continuation of the Italian-Swiss frontier, on a ridge which for a short distance divides the Glacier de Pré de Bar from the Glacier de La Neuvaz. The N. ridge, running up from the Brèche de L'Amône, is the French-Swiss frontier and divides the Glacier de La Neuvaz from the Glacier d'Argentière. The W. ridge, running up from the Col du Mt. Dolent, is the French-Italian frontier and divides the Glacier d'Argentière

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from the Glacier de Pré de Bar. These last two frontier ridges, the N. and the W., meet together on the Italian-Swiss frontier at a point considerably to the north of and about 200 ft. lower than the highest point of the mountain. The meeting-place of the three countries is not, therefore, as was once generally supposed, on the real summit.

The first ascent was made in 1864 by Whymper and Adams Reilly by the Glacier de Pré de Bar and the S.E. ridge.[1] With the exception of slight variations of the original route, no other way of reaching the top was discovered for thirty-five years. In 1901 M. Julien Gallet and his guides climbed from the Glacier du Mt. Dolent to the E. ridge, which they followed to the top.[2] This E. ridge, which is mostly snow and ice, looks exceedingly attractive from all points of view. I have examined it from high up on both sides and strongly recommend it to anyone who desires a fine ice climb, neither excessively difficult nor long. Porter and I once bivouacked for this ridge at the foot of the glacier, and spent a delightful night beside a juniper fire before rain came in the early hours and frustrated our attempt. In 1904 M. M. F. Fontaine and his guides climbed from the Glacier de Pré de Bar and reached the W. ridge at a point just east of the Col du Mt. Dolent. They then made the long traverse up and down along the ridge to the highest point.[3] A month later MM. Julius Kugy and Graziadio Bolaffio and their guides reached the Swiss side of the Brèche de L'Amône from the head of the Glacier de La Neuvaz and thence made the first ascent of the N. ridge. They put it on record that the ascent of the upper part of the glacier was excessively dangerous, and anyone who has had an opportunity of observing their route at close quarters will have no difficulty in agreeing with them. It is essentially a dangerous rather than a difficult route and I most strongly recommend its avoidance.[4]

Thus were all four of the main ridges climbed without anyone having made an ascent from the French side. This final problem was solved by the enterprise of MM. Kugy and Bolaffio, who returned to the attack in 1906. From the head of the Glacier d'Argentière they climbed the steep rock wall which runs up to the Brèche de L'Amône and thence followed

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[1] *A.J.* i. 374; ii. 101.
[2] *Jahrbuch S.A.C.* xxxvii. 6.
[3] *L'Écho des Alpes*, 1910, p. 228.
[4] *Alpi Giulie*, 1906, p. 109.

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their route of 1904 along the N. ridge.[5] In 1911 the second ascent from the French side ended in disaster. The party of Dr. Thomas, following the route of 1911, were close to the top when a great boulder, which was perched upon the ridge, overbalanced as it was touched by Auguste Blanc, the leading guide, and falling upon him, carried him to his death on the slopes of the Glacier de Pré de Bar.[6] So far as I can discover, the ascent was not repeated till last year, and as we appear to be the only English party who have ever been on this side of the mountain I have thought that a description of our climb may be of interest.

We left the hut at three o'clock and by dawn we had walked to the head of the Argentière, and for the first time were able to examine our route at close quarters. The flat surface of the glacier is divided from the Brèche de L'Amône by a well-developed bergschrund, a short but very steep slope of ice and snow and a smooth rock wall. The rock wall is cut from its base to a point close to its top by a shallow gully, which inclines slightly to the left and ends directly below the Brèche. The line of ascent follows the general direction of this gully. It was obvious that the ice slope was going to give us considerable trouble, as the only two bridges over the schrund were placed, the one far to the right and the other far to the left. It did not, however, appear very probable that we should fail to find a way into the Brèche, the difficulties which we subsequently encountered on the rocks being matters of detail hidden from our eyes at that distance. These things having been contemplated, we put on crampons and crossed that one of the bridges which was to our left. We then climbed horizontally along the ice and snow immediately below the rock face and close above the schrund, in the direction of the gully. At times we were able to rely upon our crampons, at others we were obliged by the steepness and hardness of the slope to cut every step. At one place time was saved by a retreat into the narrow gulf between the ice and the rocks, where we progressed, ungracefully perhaps, yet enjoying a feeling of security unknown upon open ice slopes set at high angles. In all, the passage of this slope, from our crossing of the schrund to our arrival at the foot of the gully, occupied an hour. The rocks were grey granite of the best Mt. Blanc description, sound beyond reproach and cut into convenient

[5] *Rivista Mensile*, 1907, p. 261; *Ö.A.Z.*, 1907, p. 9.
[6] *A.J.* xxv. 731.

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steps, up which we went in ease for some hundreds of feet in or close to the gully. The gully then dwindled for a space into a narrow crack of an unpromising aspect, and we followed in the steps of our predecessors by climbing out of it up a slab to our right. This slab is some 60 ft. high. Its lower part is easy, but at its top is a section, smooth, wet and almost devoid of foothold. The leader of the first party is reported to have surmounted this obstacle by a clever manœuvre with the rope. Porter, who, as usual, had been called upon to lead when the rock work became serious, was unable to find any way of helping himself with the rope, but went up with his customary ease and quickness. My clever manœuvre with the rope consisted in a direction to my leader to continue his ascent till he was able to hold it straight above me. I then grasped it firmly, and being at the moment more interested in a rapid arrival at the top of my mountain than in the technicalities of slab-climbing, scrambled over the bad piece without any very close attention as to the whereabouts of my feet. I am therefore in no position to gauge the exact difficulties of this passage, but Porter expressed the opinion that they were great and, his standard of rock-climbing being of the highest, it is safe to conclude that the place is very far from easy.

Above the slab we took a diagonal line upward to our left, over easy rocks, till we were back in the gully again. This we followed to the point, some 90 ft. below the ridge, where it comes to an end at the foot of a rock wall, which is an impassible barrier. Here our predecessors had traversed to the left round the buttress, which bounds the gully to the north, and by means of an overhanging chimney and a difficult slab had gained the ridge to the north of and a little above the Brèche. After a cursory and unsuccessful search for the overhanging chimney we returned to the gully. Our search was cursory because Porter had already announced that he didn't see what was to prevent him from climbing a straight narrow chimney, which divided the rock wall at the head of the gully from the buttress on its north side. This, then, he proceeded to do, taking out nearly the whole of our 80-ft. rope before he reached a ledge at the top. Placed in the Cumberland fells within a seemly proximity to one's hotel and some 2000 ft. above sea-level, this chimney would probably rank as a fairly easy place. Encountered at an altitude of 11,000 and after a good many hours of hard work, it appeared to me to be distinctly difficult. An offensive

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overhang of one wall caused the rope to pull me outwards and I had to go up, fortified, it is true, by its protection, but not directly helped by it to the extent that I would have wished. I must confess to having arrived at the top in a state of temporary exhaustion. Rucksacks and axes having been pulled up, Shadbolt followed them, I the meanwhile gasping on the ledge above and feeling uncharitable joy in hearing that he at least emitted some snorts as he came up.

On our narrow perch there was barely room for the three of us to cling. Some 15 ft. above our ledge, and to our right, was the narrow cleft in the ridge, which is the lowest point of the Brèche. To reach this cleft it was necessary to swing round a smooth rib of rock, our hands working up a secure crack but our legs in a state of semi-suspension. From below this passage had a highly unpleasing appearance, but necessity having forced us to the attempt, we all found it unexpectedly easy. It may have been the deceptive appearance of this final traverse from below, which drove our predecessors to seek the route to the left, which they found so difficult, for, so far as the chimney is concerned, our route is the obvious one.

At 9.30, 6½ hours after leaving the hut and 5 hours after crossing the schrund, we were basking in the sunshine on the Swiss side of the ridge, happy in the knowledge that the most serious part of our undertaking was behind us. The northern ridge is for the most part narrow and sharp. For a time we climbed easily along ledges on the Swiss side. As we got higher the rocks became disconcertingly loose. At one point I kicked a stone weighing a few pounds down the side of the ridge. It fell a few feet on to the top of a boulder some 6 ft. long by 4 ft. wide. This great mass—'balanced evidently only by a miracle and with an instability impossible to have foreseen,' to quote the description of the similar boulder which caused the death of Auguste Blanc—instantly plunged down the slopes below us, gathering with it as it went a formidable avalanche of stones and snow, which swept down the southern head of the Glacier de La Neuvaz, thereby finally confirming my opinion that the Swiss side of the Brèche de L'Amône is a place to be avoided.

Above this loose section of the ridge followed snow and ice, where a heavy cornice on the Swiss side forced us down into France. Here for an hour we made slow progress on a face broken into unpleasant curved furrows and ribs of the type which I describe on the authority of our President as

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'accordion pleats,' and so steep that we were obliged to go with faces turned to the slope, on the one side of the ribs kicking steps into firm snow, on the other cutting into hard ice. This led us to the point where the three frontiers meet, above which is the scene of the accident of 1911, a chaos of loose rocks piled up upon the almost horizontal ridge in a state of great insecurity. Having very gingerly made our way over this, we reached firm steep slabs almost embedded in ice, where a good deal of cutting of steps and scraping of ice from the rocks on the Swiss side of the ridge took us to the snowy summit, which we reached at 2.15, 11 hours and 20 minutes after leaving the hut.

Mt. Dolent is undeniably a mountain with an easy side, and our descent to the upper part of the Pré de Bar Glacier and thence to the Col Ferret track and La Vachey in the Italian Val Ferret calls for no description.[7]

Time was when the Col des Grandes Jorasses was much maligned, and mountaineers have been scared away from it on insufficient grounds. From the French side the appearance of the pass is extraordinarily attractive. Immensely high up on the frontier ridge a delicate bow of shining snow fills the sharply cut gap between the dark cliffs of the Jorasses and the Rochefort. I could never look at this gap, nor even Donkin's photograph of it, which hangs on our stairs here, without wishing to stand in it.

The history of the pass begins in that great year of Alpine adventure, 1864, when Messrs. Alfred and A. W. Wills, F. Taylor and A. Milman with two guides and two porters left the Montanvert at 2.30 in the morning, and after a prolonged struggle with the difficulties of the Glacier du Mt. Mallet, reached the col soon after 4 o'clock in the afternoon. Here they looked down the great couloir on the Italian side and decided that a descent was impossible. In their written records of what they saw they made free use of such decisive phrases as 'No possibility however remote,' 'The descent proved hopelessly impracticable,' and 'Sheer drop of many

[7] For a picture showing the La Neuvaz face of Mt. Dolent, the Brèche de L'Amône and the S.E., E., and N. ridges, see *A.J.* xxiii. 425.

Those who wish for fuller information as to the topography and history of Mt. Dolent should refer to the admirable monograph of Mons. Marcel Kurz in *L'Écho des Alpes*, June 1910.

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COL DES GDES. JORASSES



THE GÉANT TO THE JORASSES

FROM THE PUNTA BIOULA

COL DES HIRONDELLES

COL

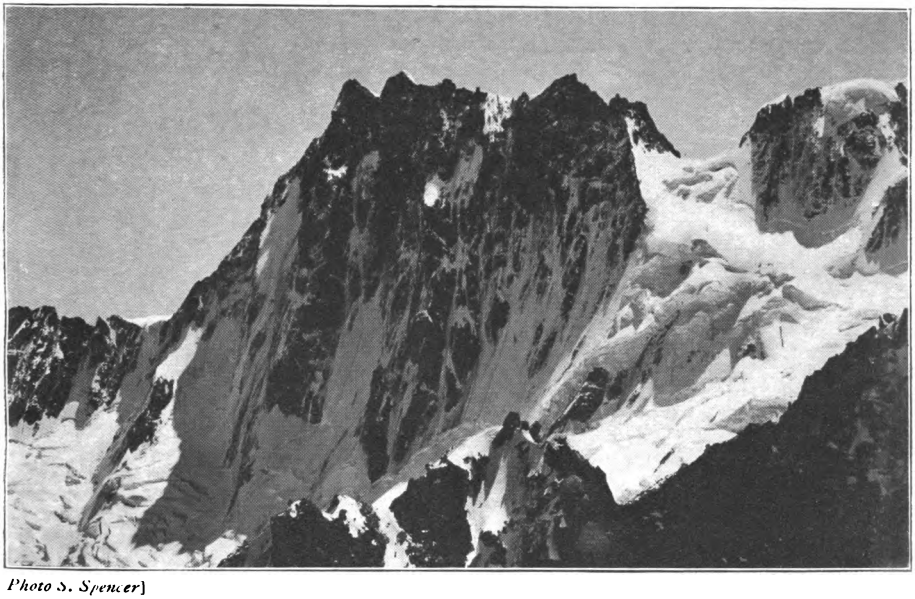


Photo S. Spencer]

GRANDES JORASSES AND N. SIDE OF COL

FROM LES PÉRIADES

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hundreds of feet of smooth and treacherous rock.' In that they decided not to attempt a descent so late in the day, their judgment was, of course, perfectly sound, though time has shown that the rocks upon which they looked down are not as inaccessible as they supposed.[8]

Beyond the bare record of the fact that Mr. Eccles once turned back from an attempt on the Italian side, I can find no further mention of the pass till its first crossing by our fellow-member, Mr. Thomas Middlemore, on July 18, 1874. His party bivouacked on the grass slopes just below the Glacier de Planpansière, reached the col by the great couloir and descended to Chamonix. In the following year Mr. Middlemore read a paper to this Club describing his expedition. Thereupon broke out a storm of protest, some part of which is reflected in the pages of our JOURNAL. To the impartial reader of the twentieth century, who has nothing to guide him but that part of each side of the case which is printed in the JOURNAL, it may well appear that the critics were denouncing sins of which there is little evidence in Mr. Middlemore's paper. He expressly states that in the couloir on the Italian side, the ascent of which was the chief cause of contention, he was able to keep out on the wall quite clear of the 'ice, stones, and such small débris' as from time to time came down it. Most of the falling stones which play so large a part in the story of the ascent appear indeed to have been dislodged by the leading guide.[9]

The second crossing, a desperate adventure in a snowstorm, on September 3, 1894, was also made by a member of this Club, Mr. Evan Mackenzie. No English account of this expedition has ever been published, and the source of my information is the 'Rivista' of the Italian Alpine Club. In August Mr. Mackenzie had made two unsuccessful assaults upon the Italian side, the second a determined effort, which only came to an end 100 mètres below the col after a narrow escape from an accident, when a porter fell off a guide's shoulders while trying to surmount a difficult rock. Mr. Mackenzie then went round to the French side, and, warned by the experience of the 1864 party, who had taken nearly fourteen hours to reach the col from the Montanvert, he bivouacked high up on the side of the Glacier du Mt. Mallet and reached the schrund immediately below the col at 8 o'clock the next morning. The crossing of this schrund

[8] *A.J.* i. 430; ii. 114.

[9] *Ibid.* vii. 104 and 225.

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occupied 2½ hours. On the slope above it they were overtaken by a snowstorm, and so difficult had the crossing been that they preferred to go down the Italian side rather than go back. The rest of the day was taken up with the descent of the couloir in heavy wind and continual snow. They groped their way down the upper part of the Planpansière Glacier through snow and darkness without a lantern and with only 12 metres of rope for a party of four, the rest having been left behind in the couloir. The remainder of the night was spent on the Rocher du Reposoir, and they ultimately got down to Courmayeur the next morning. This appears to have been the one and only crossing form north to south.[10]

The subsequent crossings of the pass have been few. I know of three made by Italian parties, in two of which members of our Club were concerned; but I can find no other record of an English crossing other than that made by our late friend Broome in August 1898,[11] though one of Mr. Ryan's unrecorded expeditions with the Lochmatters seems to have taken him into the col in 1904, and in 1911 Geoffrey Young's party climbed the Italian side on their way to the first ascent of the western ridge of the Punta Margherita.[12]

For two nights after our traverse of Mt. Dolent we lay at the little chalet inn of La Vachey, the intervening Sunday being spent in rest and a journey to Courmayeur to fetch the necessary provisions for the continuance of our climbing. On the Monday we went up to the Grandes Jorasses hut, and on the Tuesday we climbed the Grandes Jorasses, finishing our ascent by a variation of the ordinary route, to which my attention was first called by the German mountaineer Fräulein Hasenclever, whose party was the first to follow it. From the top of the Rocher du Reposoir we did not make the usual and sometimes dangerous crossing to the Rocher Whymper, but went in a straight upward line, first on a snow slope and then on rocks, to the frontier ridge. These rocks were so easy that we took off the rope before going up them. We struck the ridge at a snow-covered portion just east of the first rock tooth below the eastern ridge of the Punta Margherita. From this point we followed the ridge to the Pointe Whymper without any difficulty, sometimes on a crest of sound snow and sometimes on easy rocks.

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[10] *Rivista Mensile*, 1895, p. 1.
[11] *A.J.* xix. 412.
[12] *Ibid.* xxv. 737; xxvi. 231.

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We went somewhat leisurely, having ample time in hand, and as our time from the hut to the top was just about that which is given in the climbers' guides for the usual route, it seems that the variation takes little if any longer. If there be any doubt as to the behaviour of the snow it is the sounder route of the two.[13] This day, with perfect weather and rocks and snow in ideal condition, was something of a picnic. The crossing of the Col des Grandes Jorasses, which we accomplished the next day, can hardly be so described, though it proved to be much easier than we expected.

We spent a second night at the hut, and moved out again soon after midnight. For a time we had nothing to think about, for with the help of a lantern we were able to follow our tracks of the previous day, and so made very rapid progress. Then we diverged to the left, and at dawn were in a line immediately below our pass. Above us was a fan-shaped slope of snow and ice, its curved base ending in a great semi-circular bergschrund, and its sides bounded at the top by smooth rock walls. Where these walls converged a narrow couloir filled with ice and at first only a few feet wide ran up to a saddle of snow at the top of the pass. In big mountaineering without guides the mind is often so occupied in considering the immediate problem of the moment that for a time it remains blank to all else. In looking back and trying to reconstruct this scene, I can recall very little beyond the appearance of the couloir itself, and I find that the strongest impression was made on my brain by the exceptional extent to which I had to tilt back my head before my eyes arrived at the snow saddle at the top of the pass.

At 3.30 we were over the schrund, and just above it we rested for a few minutes under the protection of a minute rock island, probably in the exact place used for a similar purpose by Geoffrey Young's party in 1911. Above this island the surface of the slope was of just that hardness which enables one to describe it as snow if one wishes to belittle a climb and as ice if one wishes to magnify it. Here was the great justification of the crampons, which had not done much in return for their porterage since we carried them out of Argentière. A party such as ours does ill if it encumbers itself with any hard and fast rule as to who is to lead it. When the business of the day is to go far and fast, it had better make full use of such talents as are given to each of its members.

[13] *Ö.A.Z.*, 1909, p. 268. *A.J.* xxv. 85.

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Frequently last summer the front of our rope became the back and the back the front, nor did the man in the middle ever know that he might not be torn from his repose and called upon to assume a position at either end. So it is that Shadbolt, who was born with the talent of walking in steep and slippery places on claws, is now dragged into the limelight. Shod with a pair of super-crampons, long and sharp as to the spikes, heavy beyond belief yet excessively efficient, he raced up this slope at the head of our rope. I had one crampon only, the other having broken in half on the descent of Mt. Dolent.. This, however, was of the long and sharp-spiked Eckenstein variety, and with its help and a tightly strained rope above me I was just able to keep pace with Shadbolt, or perhaps I should say, to hold him back to my pace. In twenty minutes we were at the top of the slope. Without crampons we should have had to cut every step with the pick, and I do not think that we should have done it in less than two hours.

We were pulled up under the rocks of the Punta Margherita by ice too hard and steep for further progress without step cutting. Consequently we cut horizontally across the slope to a patch of rocks on its W. side. Being not yet certain that the couloir would not throw stones at us, we made this crossing with some apprehension, and the necessary steps were cut with the utmost haste. Having reached the rocks we took off our crampons, climbed easily some hundred feet to the narrow entrance to the couloir, cut a few hurried steps back to its eastern side and again landed on the rocks, this time inside the couloir and close to its icy bed. The ice was quite unclimbable, being a series of perpendicular walls divided by horizontal shelves, a frozen waterfall rather than an ice slope. A little above the level of the ice and between it and the steep eastern wall of the couloir was a narrow slope of rock up which we climbed, often close to the ice yet out of reach of anything which might have come down it. In places the rock was much shattered, yet at this time of the morning the whole was so firmly bound together by a cement of hard ice that we were able to climb it in perfect safety. Our pathway came to an abrupt end at a point high up the couloir, level with the foot of a rock rib which divides the ice stream in two. Here we had a choice between the rock rib and the farther wall, which at this level for the first time began to look feasible. The rock rib being the nearer we cut across the ice to it and climbed to its flat top, which we reached

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at 7.45. Here all possibility of danger on the Italian side being at an end, we sat down for our first meal.

Between us and the top of the pass, some 100 ft. above, was a slope of snow crowned by a cornice. I should have enjoyed my meal more could I have seen what was on the other side. At the end of the day it was observed that when we started in the morning each of us had been obsessed with a different false alarm. Shadbolt, his mind full of a vague knowledge that the Italian slope was said to be dangerous beyond reason, had raced up the ice below the couloir in imminent expectation of receiving a stone or a lump of ice on his head. Porter, misled by a description in the Austrian guide of what must be an alternative way on the buttress to the east, had expected that he would have to find an intricate route and lead up excessively difficult rocks. My fears were the last to be dispelled. I had more than once seen the final slope on the French side bare, icy and shining, the central part broken into an impassable ice cliff, the two sides guarded by a wide and open schrund. Broome had described it as 250 ft. of nearly vertical blue ice, and Porter had extracted from his guide-book the information that it is an 'Eishang' 80 mètres high. I did not know the exact shade of meaning which should be attached to this word, but at the time it seemed to me ominous and appalling, and my food stuck in my throat as I thought of myself cutting 250 steps down it. It was well that I had not then read Mr. Mackenzie's account of a schrund which took 2½ hours to cross.

The cornice did not give us much trouble. I was just able to get high enough to reach its crest with an outstretched axe, and in ten minutes had produced a sufficient hole. Then, supported by Shadbolt from below, I clambered into a niche prepared for the purpose, from that on to my axe thrust horizontally into the wall, got my arms into France, thrust into that country Porter's axe handed up to me by Shadbolt and pulled myself after it. There was a considerable chance that my precarious handhold or foothold might give way and precipitate me on to Shadbolt's head, but we were able to look forward to this calmly, for the snow slope below us was in a state of such admirable plasticity that we could not have failed to stick in it. Had it been hard, our method of crossing the frontier would have been more ceremonious.

Assembled on the top of the pass we became jubilant, for a glance was enough to assure us that we should get down without serious difficulty. Directly below us the slope curved

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down and disappeared in a few feet, but at the sides we could see enough to know that it was snow rather than ice, while both to the left and right, close under the cliffs of the Rochefort and the Jorasses, were places where it seemed probable that we should be able to cross the schrund. Truth compels me to confess that the Eishang proved to be a very ordinary slope of hard snow at an average angle of 50°. Down this I went in one long diagonal line to the western end of the schrund, my left foot firmly supported by its crampon, my right requiring every step to be carefully cut for it. Once again I observed the cramped position into which the body is forced by the necessity of cutting down so steep a slope, and once again I wondered at the statement in the Badminton Library 'Mountaineering' that it is far easier to cut down than up. We hit the schrund at a place where the upper lip overhung the lower, and, Shadbolt having volunteered to jump, we wasted no time in looking for a bridge. Porter and I slid down some 12 or 15 ft. on a doubled rope, and Shadbolt, directed by us from below, made his way to the lowest possible point on the overhang, and then taking to the air landed neatly on the ridge of soft snow beside us.

Here ended all anxiety as to the result of our expedition, and our only concern was to so order our movements for the rest of the day that we might reach Argentière in good time for dinner. From the Pointe Whymper we had seen that if we patiently skirted round the extreme edge of the Glacier du Mt. Mallet, close under Mt. Mallet and the Périades, we should avoid the many impassable sections of that much-crevassed glacier and ultimately thread our way to the level of the Glacier du Lechaux. Patience was indeed needed, for we were soon wallowing under a burning sun in a morass of soft snow, and for a time we suffered the disgusting additional torment of finding that the only possible route down took us steadily uphill. The prospect of a fine afternoon being certain, we made no great haste on our downward journey, landed on the rocks of the Capucin ridge for a restful lunch, spent an hour over our tea at the Montanvert, and then crossing the Mer de Glace reached Argentière at 6.30.

At our last winter dinner our President urged us to lift our eyes beyond the much-frequented Alps and go to the unexplored mountains of Canada or Arctic Norway. Far be it from me to preach against such sound counsel. I am only prevented from following it by the fact, of which the President

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himself reminded us, that it is well to be away for six weeks if one hopes for a fair share of climbing in a holiday spent amongst such distant mountains. There are some of us who are lucky if we can get away from our work for a holiday of more than half that length. For us, I fear, the Alps must continue to suffice. This being so, it is natural that we should desire to find fine climbs upon which the curse of popularity has not yet fallen. We seek opportunities of using our own store of experience in thinking out the details of our game, and our own judgment in deciding what may be safely done and what should be wisely left undone. So we look for places not yet overrun with other climbers, where it is improbable that we shall suffer the disappointment of finding professionally led parties in front of us. As climbing becomes more and more popular, and the average standard of skill higher and higher, this becomes a difficult quest, and we have got to be more and more on our guard against places which are unfrequented because they are dangerous rather than difficult.

Personally I have the very strongest distaste for those dangers which a climber cannot avoid, be his skill small or great. I have no use for slopes which are periodically swept by falling ice, and in the sport of stone-dodging, described with such gusto by Mummery, it has long appeared to me that the odds are not sufficiently in favour of the dodger.[14] No one of the three of us looked upon either of the two expeditions which I have tried to describe to-night as exceptionally dangerous. Given a leader who can climb it, the face between the Argentière Glacier and the Brèche de L'Amône is a very safe place. Nothing fell down it while we were there, nor is it a place where anything of consequence is likely to fall at any time of day except after fresh snow. It has been proved that the looseness of the ridge above the Brèche can be a danger, and I am told that the accident to Blanc has made some guides reluctant to undertake the expedition. This is natural enough, but the accident might have happened on many popular mountains, and the north ridge of Mt. Dolent is no more dangerous than other loose places—for example, the rocks on the Italian slope of the Col de Miage, which have been used as mountain highways any time these last sixty years.

As to the Col des Grandes Jorasses, I give my vote for its acquittal of the charges brought against it, for with due

[14] *My Climbs in the Alps and Caucasus*, p. 37.

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precautions as to time and weather I can see nothing on either side of it to make it more dangerous than other expeditions, which have long been looked upon with general approval. From our crossing of the bergschrund to the beginning of our descent, 5½ hours in all, we were in or close to the couloir on the Italian side, and during that time we neither saw nor heard anything go down it, with the exception of one small stone, which fell from immediately below us and had probably been dislodged by our passage over it.

Let nothing which I have said be interpreted as an assertion that this couloir is a healthy place in which to spend an afternoon. It must be remembered that we were safe on the top of the rock rib close under the col before 8 o'clock in the morning. Up to that time no part of the couloir had been touched by the sun. Mr. Middlemore, on his much criticised first crossing, unaided as his followers have been by crampons and a comfortable hut more than 9000 ft. above the sea, reached the same point at about 4 o'clock in the afternoon.

Successes and Failures in 1920.

By NOEL E. ODELL.

(Read before the Alpine Club, December 6, 1920.)

WE were greeted on our arrival at Argentière, on July 3, by torrents of rain, and every feature down to about 6000 ft. was enshrouded in cloud. This was at once attributed to the advent of that member of the party—a meteorologist, by the way—who has the reputation of bringing bad weather wherever he goes, at least in British mountains: it looked as if the extent of his evil influence was wider even than he had supposed! However, the optimists of the party triumphed, and by evening three happy individuals were to be seen visiting the snout of the Argentière Glacier, and even literally tasting glacier-ice once more after so many years' absence from its spell!

The day after arrival some of us walked down to Les Bossons by way of training, and endeavoured, with partial success only, to procure crampons from Simonds' 'Fabrique.' (In passing, it may be mentioned that Simond Frères turn out an ice-axe with wonderful balance and for real use.) We

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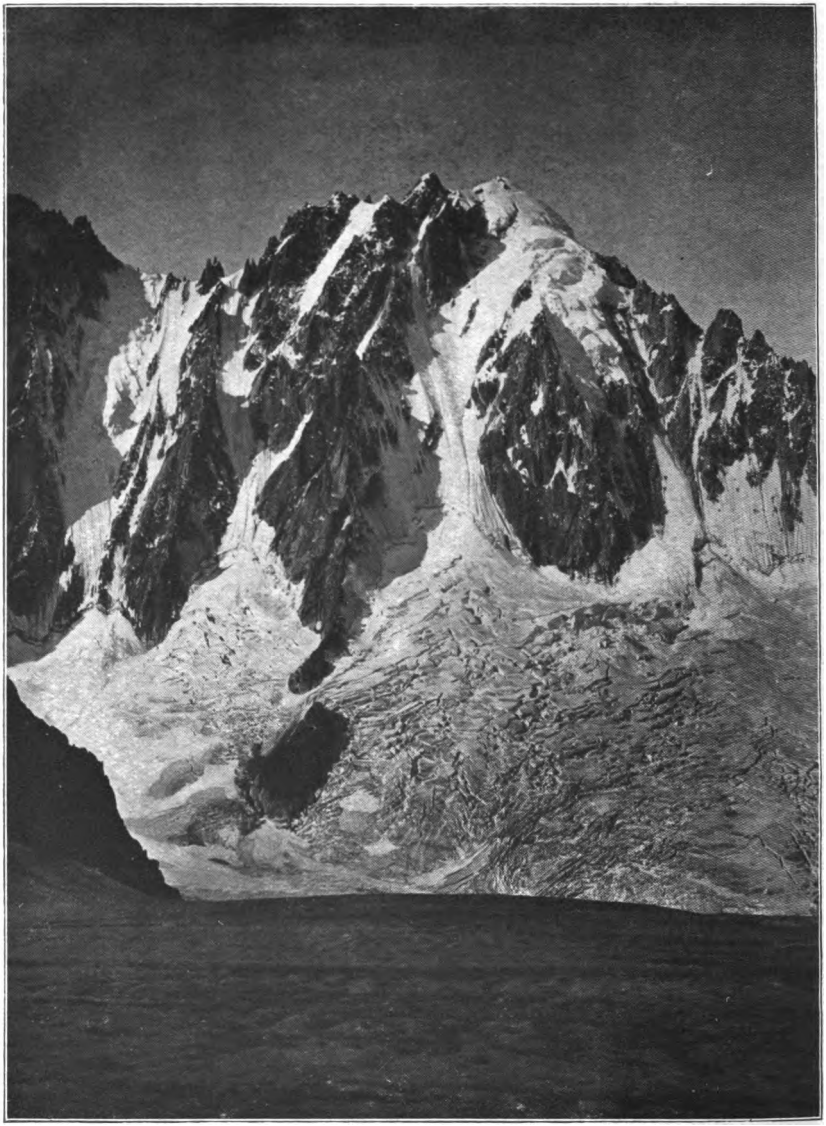


Photo S. Spencer]

AIGUILLE VERTE

FROM COL DU CHARDONNET

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returned to Argentière by way of the Montanvert and the Mer de Glace.

The following day there seemed to be a general restlessness to be off and doing something serious. Consequently Frazer, Stobart, and I left Argentière in the afternoon, and toiled up the track to the Lognan, adding to our already sufficiently loaded rucksacks what firewood for the hut we could collect in the woods. The Lognan inn proved, as it ever did on later expeditions, a most demoralising flesh-pot to climbers bound for the Jardin hut, although the opinion was always stoutly advanced that indulgence here saved consumption of supplies at the hut! Anyhow, whether or not this was the cause of it, the party undoubtedly took its time on the long walk up the glacier to the Jardin. And well it might, for what lovelier place is there than the Argentière Glacier when the evening sun strikes up that long vista towards the Col Dolent with its array of steep icy precipices on either hand. Before leaving England Captain Farrar had told me about his attempt on the Aiguille Verte from the N.E. by an arête running steeply up from the Argentière Glacier. This attempt he made on August 21, 1898, with the guides Daniel Maquignaz and Kederbacher. They got about half-way or so up the ridge when the difficulties and the approach of night obliged them to turn back. I wish Captain Farrar could have been here to-night to tell us all about this expedition.

We identified this ridge running up from the huge rognon in the glacier. It seemed in its lower part to offer wonderful stretches of clean rock ridge, and higher up all the uncertainty and complexity of character and structure that go to form a really first-class climb. But in our untrained condition it seemed folly to entertain any idea of tackling such a proposition. The hut had been occupied by a party a month previously, who according to the book had made the first ascent of the season of the Aiguille d'Argentière. This had been our intention, as a very good training climb. But whether from the invigorating effects of hot soup and tea, or from the spell induced by that marvellous scene from the door of the hut—the unsubstantial forms of the Verte, Les Droites, and Les Courtes bathed in moonlight—the extremists of the party had the audacity to suggest that the aforementioned ridge of the Verte looked too enticing to be neglected on the morrow, and that at least an attempt might be made upon it! The night was cold and the weather most promising. There was the chance of a new route completed and a first ascent of

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the Verte for the year. We would go prepared for a night out.

We were off at 3.45 A.M., and soon sped across the glacier to the rognon at the foot of our ridge. By 4.30 we had skirted the rather crevassed portion of glacier on the S. side of the rognon, and were starting up the ridge. Almost from the very outset the climbing was severe—that is to say, severe as adjudged by British rock-climbing standards. The first big gendarme looked impossible to take direct, so after traversing round on to the right side of it in hopes of easier ground, a way was found up its steep N. face. The rock-structure was of that uncompromising holdless character, with joints or ledges about 20 ft. apart, and formed angular recesses just too wide open to climb effectually by 'bridging.' I could only get up one or two places by jamming my axe and then practically swarming up it. A second breakfast at 7.10 gave renewed vigour for the struggle—a struggle with some of the hardest rocks within my experience. As we got higher we were confronted with snow treacherously plastered on to the rock slabs. One had to cut a step and then very gingerly climb into it for fear of its breaking through into the next one below. At some places it was necessary to clear long stretches of snow from the rock, and at others to deal with verglas, or cut steps in a sub-layer of ice stuck on to the rock. After several hours of strenuous work of this nature we reached at 1 P.M. a dos d'âne of rock running up from a gap in the ridge. Captain Farrar had told me that the highest point reached by his party was a small gap in the ridge with a sensational dos d'âne above it, and that they had piled some stones together in the rocky cup of the gap. Well, the stones, if there, were deeply submerged in snow, but we concluded we had reached his highest point.

The dos d'âne was surmounted after much struggling and anxious inquiries, meanwhile, from those below. The top of it landed one on a gallery on the great N. wall of the ridge, and a more stimulating situation it would be hard to find. To gain the arête again from here was the next problem, and while the second man jammed himself for a belay in a horrid wet crack at the back of the ledge, the leader negotiated what was considered one of the hardest pitches of the climb, that is, a slab at a high angle with a 6-in. coating of snow. But the dos d'âne already passed was a small affair compared with another higher up. Here one straddled a painfully sharp steep knife-edge at a considerable angle for 80 or 90 ft. with a

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most profound drop down to the ice-slopes descending from the ridge of the Grande Rocheuse.

Meanwhile, clouds had been gathering around the summit above us, and we had been too occupied to notice occasional falling snow-flakes. At 4 P.M. it was put to the party that we must either turn back at once or find a place where we were, or higher up, for the night, and try to reach the summit the next day. In view of the bad weather prospects it was regretfully decided to retreat. We had reached an altitude of about 12,000 ft., and not much more than half the total length of the ridge, as far as we could judge, and there seemed to be a good many hours of hard climbing ahead up to the summit. After descending nearly as far as the first dos d'âne we thought it looked possible to get off the ridge on the S. side if the final cliff above the bergschrund were negotiable. We scrambled down a fairly easy gully, and after searching in many directions found we were quite cut off by a sheer 300-ft. wall and an impossible looking bergschrund. So the only thing to be done was to climb up again to the arête and descend by way of all the difficulties of the morning. One abortive attempt was made to get down the steep *northern* slopes to the glacier, and then darkness overtook us and we had speedily to find a place whereon to spend the night. All that there was available for a perch on this steep N. face of the ridge was a split block sticking out of the ice-slope, and in the crevice of this block, scarcely more than 2 ft. wide and 3 ft. long and open at the ends, we huddled together for the night. Although it snowed on us most of the night, and we were at an altitude of about 11,000 ft., yet by dint of singing loud and long, the programme extending through Stobart's almost inexhaustible répertoire to any and every hymn we could think of, we were enabled in some small degree to ward off shivering—at any rate that of the audible variety—and keep ourselves more or less awake. Vivid lightning to the N. and E. and ominous rumblings of thunder gave lively imaginings of excitement to come in our exposed position. At 3 A.M. we carefully and painfully straightened ourselves out from the cramped position of the night, and no cases of frost-bite were reported. On the first gleam of light at 4 o'clock we saw that our difficult work of yesterday was rendered more difficult for the descent by the fresh coating of snow on everything. All the cramp and chill of the night were soon forgotten on the first stretch of extremely delicate work down smooth rock alternating with ice—the

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whole freshly covered in snow. At 7 A.M. we reached a sufficiently commodious ledge, and we were right thankful to be able to relax tension and eat the remains of a lingering supply of food. From here we could see a likely bridge over the bergschrund below, and accordingly we cut straight down to it to avoid the difficult work of the previous day on the N. side of the first towers. By 9.30 we were across the bergschrund, and not a little thankful to terminate for the time being our visit to the N.E. face of the Verte after thirty hours on it. Lognan was reached at 11.30, and not long after Argentière, where the rest of our party were anxiously awaiting us, having expected us back not later than dinner-time the previous evening.

Captain Farrar has lent me a copy of an extract from the *Bollettino* of the Italian Alpine Club, published in 1905. It contains a description by the Signori Gugliermina, E. Canzio, and G. Lampugnani of the climbs on the Aig. Verte up to that date, and contains some instructive illustrations. Captain Farrar has marked on a view of the N.E. face his line of route and the probable height reached. It seems to show that he got higher than we did, but what is more interesting, he avoided a great deal of the difficult climbing on the lower part of the ridge by cutting in on the S. side and striking the arête proper somewhere where we tried to make a hurried exit and failed on the descent. Apart from the difficulty of prospecting steep rocks from above, the bergschrund this year was quite impossible at the point where he crossed it. He says our conditions must have been much worse than his.

A route which starts in the couloir to the S. of our arête was made in 1895 by Mr. V. A. Fynn and Mr. P. Goudet. They eventually worked on to the buttress of rock to their left, which led them to the foot of the Grande Rocheuse: they descended on the Talèfre side. In 1876 Messrs. Cordier, Oakley-Maund, and Middlemore, with Jacob Anderegg and two other guides, ascended the Verte from the Argentière Glacier by a route on the N. side of the couloir of which our arête formed the S. bank.

But a veritable *tour de force* was made in 1901 by the two Gugliermina, with Brocherel of Courmayeur as a porter. They went straight up the terrific-looking couloir immediately under the Col de l'Aiguille Verte, and after hours of difficult ice-work spent the night on a rock at about 11,800 ft. They crossed the col at 11 A.M. next day, and reached Montanvert at 9 P.M. From our arête we could see the line of their ascent,

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which this year seemed to lie in part directly beneath delicately suspended hanging glacier.

The only other attempt on this side of the mountain that I am aware of was the unsuccessful one by Lord Wentworth with Emile Rey and another guide in 1876 by way of the ridge from the Petite Aiguille Verte. Captain Farrar likewise made an attempt along this ridge in 1898, and reached the last tower immediately to the N. of the Pointe Carrée.

Two days later we were out again, and Frazer led my wife and myself by a most delectable and instructive route, and a safe one withal, through the main Argentière icefall to above Lognan.

We next visited Montanvert, and started off at 2.30 the following morning for an unknown destination—some mooted the Charmoz, others the Grépon.

The advantages of guideless climbing are many; the disadvantages, it may be argued, are considerable. Not the least inconsiderable is the fact that one reads descriptions of climbs, and learns all the trials and errors of one's forerunners. Yet on the mountain, instead of trusting to such mountaineering instinct as one may possess, there is a tendency to recall this book-gleaned knowledge and work to that.

I must accept the responsibility for leading the party astray on the Nantillons Glacier on this particular day, costing us our peak.

Mummery relates when his party was cutting up the Nantillons Glacier how another party, led by an Oberlander, was rapidly overtaking them on the rocks to the right, now known as the rognon. Burgener by herculean efforts reached the upper glacier simultaneously. Mummery then observes that the rocks are undoubtedly the proper route. Now having this incident fast in my memory, we made straight for the rocks, and started up what looked the most feasible route. Things went all right, but higher up the climbing became increasingly difficult, and there appeared no way of traversing away to easier rocks to the left. After a couple of hours of this unexpected kind of thing, we decided to descend and go up by the glacier. The man at the tail of the rope took the lead down, and led us away to the right and across a steep snow-slope to an extremely steep stretch of ice-plastered rock running abruptly down to the bergschrund. All this cost so much time that anything ambitious had to be postponed, and a return made to the Montanvert. On our way back we were able to render some aid to a Swiss who had met with an

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accident below the Aiguille de l'M., and had to be carried back to the Montanvert. He had the grit to struggle down to dinner that evening and stand the whole English company champagne! It seems unheard of that no stretcher was available at the Montanvert.

More expeditions followed, some successful, others failures: the weather in July being exasperating at times for climbing.

On August 2 my wife, Frazer, and I went up to the Grands Mulets, and next morning at 12.15 started in glorious moonlight for the Mont Blanc. We found raquettes very useful when the snow got soft. On the Grand Plateau the weather looked doubtful, and at the Refuge Vallot a high wind had got up. We waited two hours, and meantime were joined by other parties, who soon decided it was too bad to proceed. We were the last to leave the hut, and the wind and driving snow on emerging made it hard to keep on one's feet, much less make the right direction. We all eventually reached the Grands Mulets, and later the Montanvert.

Our next successful attempt was the Grépon. Since our failure on the Nantillons rognon, we had been driven back by a blizzard from the Charmoz-Grépon Col. This time we climbed the Grands Charmoz first and then traversed the Grépon. We were greedy enough to hope for the Blaitière as well, but another party ahead of us just as we were descending from the Charmoz spoilt our chances.

The Grépon is without doubt one of the finest rock-climbs imaginable. Its sublime surroundings are possibly the secret of some of its charm. As regards difficulty, our expectations were not quite reached, possibly due to our wearing rubber shoes—that ideal footgear for most types of rock—but, on the other hand, we carried three axes, heavy rucksacks, and our boots, in view of our designs on the Blaitière. A pleasant way to the Charmoz-Grépon Col, avoiding the rather loose upper reaches of the couloir, was found by breaking through on to the Mer de Glace side by a steep chimney near the parting of the ways for the Charmoz and Grépon, and thence by easy ledges to the col. We saved exertion by traversing into the Mummery crack about half-way up, the top being reached comparatively fresh. This traverse needs delicate balance.

The delight of the whole climb seems to me concentrated about that wonderful *Abseil* from the lower summit to the gap near the 'vire aux bicyclettes.'

The next expedition was, as far as I can ascertain, a new route on the Petits Charmoz. It ran up the E. face from

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the small Glacier de la Thendia to a gendarme on the ridge N. of the Col de l'Etala, and gave about 1000 ft. of fine slab-climbing of moderate difficulty on remarkably sound rock. Mr. W. H. Lewin, who has had the audacity to take up mountaineering, and more especially rock-climbing, at an age when many think it is time to give it up, led the lower part of this climb, starting from near the foot of the couloir running down from the Col de la Bûche on the E. The finish was made up the southern chimney to the summit of the Petits Charmoz. Mons. Émile Fontaine made a route hereabouts, but I think it lay a little farther to the right, or N. of ours.

I should like to refer to a contrivance which Mr. Lewin has designed *to protect the leader in exposed situations on rocks.* It consists of a small pulley through which the leader's rope is passed. It is hitched by him to any handy projection, the idea being that in case of his fall there is, so to speak, an elastic belay whereon it may be checked by a vigilant second. The pulley might be of use in the case of an accident, and its lightness (16 oz.) makes it well worth carrying. It is on sale at Beale's in Shaftesbury Avenue.

The weather round about August 4 became stormy, with lightning actually setting fire to the woods, while balls of fire on two successive nights were seen balancing on the points of the roof of the hotel. I shall never forget the sight of the colossal discharges off the top of the Dru.

Our next expedition from the Montanvert was the Grand Dru, admirably led by Frazer. A party benighted on the Petit Dru delayed our start until their return to the hut, and so we were unable to traverse both peaks. Frazer, who adapts his clothing to every degree of temperature, left his shirt on the Grand Dru: this was picked up some weeks later by Mr. Carr, who may like to take this opportunity of returning it to its owner!

My last expedition before leaving Argentière was with Mr. Carr and his guide, Ignace Zurbriggen, of Saas-Fée. From the Flegère we ascended the prominent little rock peak on the main ridge called Le Pouce. It reminded me in many respects of the 'Inaccessible Pinnacle' in Skye. Young Zurbriggen, who is at any rate a first-class rock climber, led us by a new and very difficult route up its N. side. Perhaps I may mention that Alasdair Odell, aged 2 (named after Sgurr Alasdair in Skye), made the ascent to the Col des Montets in a perambulator, but proceeded to foot it at a great rate

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down the other side to Le Buet—possibly an indication of mountain fleetness to come!

Before closing this paper, I should like to mention that useful preliminary training for the party was had last Easter at a camp in Glen Nevis, and I venture to support Mr. Raeburn's opinion that the conditions of the snow and the actual climbing obtainable on Ben Nevis and Carn Dearg at Easter make it an invaluable home training-ground for guideless climbers.

F. F. Tuckett's Diaries and Letters.[1]

TO the dwindling band of his contemporaries as well as to mountaineers of a younger generation it has been for years a matter of regret that no collection of F. F. Tuckett's Papers and Articles should have found a place in our English Alpine literature. A career remarkable and in some respects unique obviously deserved a permanent record: while Tuckett's friends felt that it would be a pity if no attempt was made to present to the public some sketch of a figure and a character so conspicuous in the early annals of the Alpine Club more complete than the notice published at the time of his death in this JOURNAL (vol. xxvii.). What we looked for in the present work was, therefore, a sympathetic portrait of the man together with a summary of his mountain wanderings that would emphasise their distinctive features and bring into prominence Tuckett's varied qualities as a pioneer.

Our hopes and expectations, we must regretfully confess, have been only imperfectly fulfilled. Tuckett's natural modesty and habitual avoidance of publicity concealed from all but his family and intimate acquaintances a character of singular charm and a mind at once exact and versatile, and stored with the most varied knowledge. His interests and sympathies were as wide as his travels, and these extended to every quarter of the globe.

His relative, who has contributed the concise biographical sketch which opens the volume, has been too discreet in a case where there was no call for discretion. We miss the personal details, the intimate human touches, which enable

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[1] *A Pioneer in the Alps.* Alpine Diaries and Letters of F. F. Tuckett, 1856-1874. (Arnold, 21*s.* 1920.)

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a reader to recall, or to realise, a personality. As a friendly reviewer has remarked elsewhere, Tuckett will be left in the minds of our successors a mythical figure rather than a vivid personality. We should have welcomed a more lengthy and life-like presentation of the manifold energies and intellectual versatility which were as remarkable features in Tuckett's character as his power of physical endurance. He had a memory stored with the most miscellaneous knowledge, which was always ready for use and at his friends' service. In their company his conversation never flagged or failed of interest, and it was supplemented for their benefit by an immense correspondence distinguished by a handwriting for many years exquisite and never obscure.

In their main task—that of presenting some satisfactory, if summary, record of Tuckett's brilliant exploits and explorations—the producers of this volume (we are left in some doubt as to the respective extent of their responsibility) have been on the whole successful. We may reasonably regret that the diaries, instead of being thrust between the letters and other matter, were not reserved for an appendix. Had this been done a more connected and attractive narrative would have resulted. In some cases Tuckett's revised form of his notes in his contributions to the 'New Expeditions' published in our pages might have furnished more suitable material than the original note-books. But we owe a real debt to Mr. Coolidge for the minute care with which he has annotated the Diaries and brought their nomenclature up to date, a troublesome business in which even his superhuman industry has not attained infallibility. For instance, when we read (p. 50) 'Mont Iseran was a grand object' we look in vain for an explanation of what peak represented on the occasion the legendary summit? Again, a reference to 'New Expeditions' in our pages (vol. ii. p. 151) proves that it was by the Dosegu, formerly called the Gavia Glacier, and not by the Forno, and by the S.W. and S. and not by the S.E. ridge, that the Punta di San Matteo was first climbed (p. 215).

In another direction we cannot but hold that Mr. Coolidge's zeal has carried him too far. Surely it is an editor's business to correct obvious slips of orthography in the MSS. before him rather than to add a censorious '*sic*' to every occasional lapse. When Tuckett writes of an inn in the Trentino as 'Italian,' to comment 'a slip for Austrian' seems pedantic. At the date Tuckett wrote, the Trentino was geographically and ethnologically Italian: it is now happily Italian also politically.

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We have done with criticism and gladly turn to appreciate the contents of a volume which may be studied with profit by all who care to investigate the origins of modern mountaineering. The reader will find in these condensed and fragmentary narratives of Alpine tours a double source of interest. He may look at them both from the personal, and from the more general, point of view. He will first follow the footsteps of this Ulysses of the Alps, a pioneer indefatigable and insatiable in the quest of new impressions, keen in the pursuit of unfrequented valleys or of untrodden peaks, as happy among the chestnuts as on the glaciers. He will watch him ranging from the confines of Carinthia to the Alps of Dauphiné, leaping from group to group and conquering space by an apparent disregard for sleep. He will, for instance, note his rush from the Bedole Alp over the Adamello to Pontresina without a halt in forty hours, or that from the Baths of Masino over the Passo di Bondo to Splugen in less than thirty, or his ascent of the Disgrazia that ended the same evening at Varenna on the Lake of Como. These wild steeplechases, he will soon recognise, were not incompatible with observations which produced solid results both in orography and hypsometry. First in Dauphiné and later in the Ortler Group, Tuckett did much to aid in the correction of the very defective official surveys—French, Austrian, and Italian—of the period. In this work he was enormously aided by his talent for making singularly accurate pencil-drawings and panoramas, a few specimens (but not the best) of which are given in this volume. Travel among the Italo-Austrian Alps was not in those days free from perils by the local guardians of the frontiers. Tuckett was more than once arrested, but in such plights his sense of humour and command of languages invariably stood him in good stead. Such indeed was his conversational charm that on one occasion a devout Tyrolese Pfarrer, who had been Tuckett's host, expressed on parting his regret that, owing to the unfortunate creed of his guest, he could not look forward with any confidence to meeting him again as among the joys of heaven.

Tuckett's diaries throw light not only on his own doings but on the progress of the art of climbing from the date of its pioneers up to the present, when it needs for its exposition the two substantial volumes of many hundred pages added to our shelves by masters of the craft, Mr. G. W. Young and Mr. H. Raeburn. Our Early Fathers set out not with ice-axes, but alpenstocks; they did not specialise in clothes,

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they wore veils, they carried clumsy knapsacks. The rucksack was an innovation introduced amongst English climbers by Tuckett, and the practical adoption of the sleeping-bag we owe mainly to him, even if Francis Galton claims the original idea.

But the greatest changes have been the result of the multiplication of mountain inns and huts. We find Tuckett and his friends constantly starting soon after midnight for their expeditions. When a long valley-walk preceded the climb this was needful in order to have a chance of finding the snow firm. On at least one occasion the party did better and set out after supper for the next day's mountain. They saw marvellous twilights and moonlights melting slowly into the full rose of dawn; they escaped lying packed in close and smoky dens with a miscellaneous rabble. These were their rewards for what was doubtless a severe effort. But their day's task did not leave them either the time or the full energy to grapple with the more intricate problems of rock gymnastics which have formed so large a part of the interest of younger generations. With most of these pioneers, Hinchliff, Whymper, Ball, Ormsby, pre-eminently with Tuckett, mountaineering was a branch of travel rather than a form of sport. In any complete estimate of Tuckett's career the fact, which this volume only incidentally refers to, must be constantly borne in mind that he climbed not only in the Alps but in the Pyrenees, Corsica, Italy, Algeria, Greece, and Bosnia, and that he three times went round the world.

The Alpine Career of the Earl of Lovelace (Lord Wentworth).[1]

WE are grateful to Lady Lovelace for giving the public the opportunity of reading these letters, addressed mostly to her, by her husband. They may form an appropriate complement to Tuckett's Diaries, for both serve to bring back pleasant memories of the Tyrol of forty years ago before the tourist invasion. The mountaineer roaming eastward of the Ortler becomes conscious he has entered into a new country and among a different race. The German Swiss have

[1] *Ralph Earl of Lovelace.* A Memoir by Mary Countess of Lovelace. (Christophers. 1920.)

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many virtues, they are frugal, industrious, and practical, but no one would call them picturesque or romantic. The Central Tyrolese peasantry are both, in no doubt a homely but a very real way. They combine much 'joie de vivre' with devotion to a religion which they trust will cover and condone any moderate amount of excess. Saints' days are frequent, and the village inn is a scene of boisterous gaiety when the smartly bedizened youth of both sexes meet to the sound of the zither. The character of a people still little spoilt by contact with the outer world adds to the pleasure of the wanderer among their green valleys and broad glaciers. To this side of Tyrolese travel Lord Lovelace shows himself very much alive. Here is a touching picture from Vent in the Oetzthal:

> 'I went into the churchyard and looked at the children's graves, all in a group, which I had not before seen. The subject was differently treated in the paintings on the plaques in the centre of the crosses. In some an angel was flying upwards with the child in its arms. In others the child was in a boat on an extensive tranquil sheet of water. Far in the background are the child's native mountains, and an angel is rowing the boat rapidly towards a sunny and flowery shore. In others the angel is guiding the child in a pleasure ground; it can just walk with the angel's support, and is stretching both hands forward with infantile delight. There are others where the angel is in charge of a whole group of innocent children.'

Lord Lovelace's letters are full not only of human incident but also of appreciation of rock-climbs and scenery. He describes the wide views from the Carnic rock-peaks (where names occur, such as the Rombon and Caporetto, which have become only too familiar to us)—views which ranged over the vast level of Udine, bounded in the extreme 'distance by the white line of the lagoons of Aquileia, beyond which I saw the dark open sea losing itself in an unseizable horizon?'

Lord Lovelace's Alpine climbs were many, and ranged over more than thirty years. They were, at any rate in the extremes touched, almost as widespread as Tuckett's. They extended from the Kellerwand, from Tarvis and Sacile, through the Gross Glockner and Oetzthal districts and the Dolomites to Zermatt, Chamonix and Dauphiné. They included the traverse of the Meije (at the age of 56), the ascents of the Aiguille Noire de Peuteret (ALPINE JOURNAL, vol. ix.), the

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Aiguille Verte, the Grépon, the Matterhorn, the Dent Blanche, the Gabelhorn, most of the celebrated Dolomite scrambles, including the Delagothurm (four times). Of the last a vivid description is given:

> 'It was yesterday morning that I reached again the narrow resting-place between unfathomable abysses whence one sees the green world of summer in all its loveliness, but from which one has the sensation of being cut off for ever by a drop on every side which one's eyes can hardly bear to contemplate. I and my two guides passed more than an hour on the summit basking in the sun with not a breath of wind, gazing on distant towns and villages amidst green mountains and green plateaus and sombre forests and making up one's mind to face the walls up which we had crawled—that is still with one's face in the rock, crawling down backwards.'

The guides on this occasion were Bettega and Zagonel, Lord Lovelace's constant companions, whom he once invited to try conclusions with the crags about his home under the seaward cliffs of Exmoor.

These rapid sketches of travel give evidence of a literary talent which excites regret that we have not more Alpine chapters from the pen of Lord Byron's grandson.

The following curtailed list of Lord Lovelace's expeditions may serve to give an idea of his energies and the variety of his Alpine career:

1847, Rigi; 1853, Titlis, &c.; 1856, Joderhorn; 1858, Hohthäligrat, Piz Languard, &c.; 1860, Zugspitze; 1863, Piz Bernina, Windgälle, Uri Rothstock, &c.; 1864, Monte Rosa (Dufourspitze), Hangendgletscherhorn, &c.; 1870, Grivola, Dent du Midi, Buet; 1871, Finsteraarhorn, Grand Combin, Aiguille de la Za, Matterhorn (bivouac 10 ft. below the top), &c.; 1872, Marmolada, &c.; 1873, Antelao; 1874, Pelmo, Pointe des Ecrins (5th ascent), Monte Viso, Eastern Levanna (1st ascent by travellers), Grand Paradis; 1875, (for the great climbs this year see the facsimile of Ulrich Lauener's 'Führerbuch,' 'A.J.' xxx. 308), Aletschhorn, Mont Blanc, Schreckhorn, Finsteraarhorn, Jungfrau from Roththal, with descent by the Silberlücke, Schmadrijoch, Zinal Rothhorn traverse, Weisshorn, Lyskamm, Mont Durand, &c.; 1876, Eiger, Bietschhorn, Grandes Jorasses, Castor, Strahlhorn; 1877, Rutor, Aiguille de Rochefort, Aiguille Noire de Peuteret (1st ascent, 'A.J.' ix. 1–3), Punta Giordano

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of the Jumeaux de Valtournanche (1st ascent, 'A.J.' ix. 3–5), Matterhorn (traverse); 1879, Sorapiss, Monte Cristallo; 1880, Wildspitze, Wiesbachhorn, &c.; 1884, Zimbaspitze Fluchthorn, Wetterhorn, &c.; 1885, Weisskugel, &c.; 1886, Patteriol, Königsspitze, Ortler, &c.; 1887, Kuchenspitze, Dachstein, &c.; 1888, Zuckerhütl, Schrankogel, &c.; 1891, Diablerets, Grandes Charmoz, Aiguille Verte, Cima Tosa, Presanella, Carè Alto, Adamello, Cima di Brenta; 1894, Birkkarspitze, &c.; 1895, Nordend, Dom, Meije, Täschhorn, Ober Gabelhorn, Dent Blanche, &c.; 1896, Mönch, Laquinhorn, Fletschhorn, Trifthorn, &c.; 1897, Grande and Petite Dents de Morcles, Pierre Cabotz and Tête à Pierre Grept, Aiguilles Rouges d'Arolla, Dents des Bouquetins, Aiguille du Tacul, Grépon, Mominghorn, &c.; 1898, Cima and Campanile di Val di Roda, Cima della Madonna, Sass Maor, Pala di San Martino, Cimone della Pala, Winklerthurm, Fünffingerspitze, Delagothurm, Piz Popena, Kleine Zinne (N. face), &c.; 1899, Figlio della Rosetta, &c., Sass Maor (traverse N. to S.), Rosetta (W. face), Camp. di Castrozza, Delagothurm (2nd and 3rd times); 1901, Corno Schmitt, Torre Felicità, Rosetta (W. face—descent to Forcella Cusiglio), Dente della Pala, Pala di S. Martino (traverse), Delagothurm (4th time).

The Environs of the Polset Hut in the Tarantaise.

THE excellent Polset hut, or rather Alpine inn, built in 1913, facilitates climbing in a rarely visited glacier group. The hut can be reached in about 3½ hours from Pralognan. The fact that it is about 5 hours from Modane gives this hut a claim to be the most accessible Alpine climbing centre for English people. (The Turin expresses from Paris stop at Modane.)

Provided the month chosen be not August, a mountaineer who is not too ambitious can spend ten days very pleasantly at the Polset hut. The existence of a virgin peak of some 11,000 ft. unconquered till 1913 and of another summit of about 10,000 ft. apparently still virgin is proof that exploration has not been so intensive here as elsewhere in the Alps.

The following are some of the expeditions which may be made from the hut and back to it:

The traverse of the three Polset peaks, the Pic du Bouchet, the Pointe Renod, and the point marked 3325 m., 14 hours. In either ascending or descending any of the Polset peaks the

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immense détour up the Glacier Blanc (a route hallowed by local custom) should be avoided and the obviously direct way should be taken.

The traverse of the three Peclet peaks, 7¾ hours. It is best to include the Aiguille du Polset to save step-cutting.

Aiguille Doran by North ridge and Rateau d'Aussois, 13 hours.

Traverse of the Pointe de l'Echelle, 9 hours.

Western and Central Pointes de la Partie, 9 hours.

The last three expeditions appear to provide the most interesting climbing in the district. The gap in the N. ridge of the Doran can be reached direct by climbing the rock gully leading up to it (in about 15 minutes). The ascent from the gap to the peak takes another 45 minutes.

I believe that the complete traverse of the whole ridge connecting the Pointe de l'Echelle with the western Pointe de la Partie has never been done. Part of it I accomplished with Pierre Blanc in July 1920. After climbing the Echelle we followed the ridge southward for about 100 yards, and leaving it before it began to dip we descended by smooth slabs with sparse holds to the head of the couloir that plunged south from the gap between the Echelle and the eastern Pointe de la Partie, a rock spike well seen from the hut.

Caution was necessary in glissading down the couloir, as at the foot of it there was a bergschrund which had to be jumped. This route up the Pointe de l'Echelle was first taken by MM. Ern, Begey, and Grotanelli in 1912. From the top of the mountain to the hut took us 3 hours.

Yet another portion of this uncompleted traverse we accomplished a few days later when we ascended the highest or central Pointe de la Partie, reaching it from the top of the western peak.

Our hope that our ascent might be the first was not fulfilled, for we found in a diminutive cairn the names of Signori Ouaglia, Pizzotti Sitia, and Novarese who had preceded us in 1913. The peak has a slender and forbidding appearance, but the rocks are steep without being formidable, and if this ascent secures the popularity it deserves, the holds would soon become fairly sound.

A remaining portion of the ridge is as far as I know untouched. It extends from the summit of the central Pointe de la Partie to the gap between the eastern Pointe de la Partie and the Pointe de l'Echelle. It thus includes the eastern Pointe de la Partie (the rock spike previously mentioned), which is apparently a virgin peak.

C. F. Meade.

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'Clocking' a Zermatt Glacier.

By A. C. MORRISON-BELL.

IT is always hard to realise that a glacier—that great solid mass of frozen stolidity—is continually and relentlessly on the move, but this of course is well known even to the casual tourist, and that this movement can be quite easily recognised by allowing the glacier to show off its paces. The extent of this movement at some familiar spot on one of the Zermatt glaciers interested me much when there in 1918, and I accordingly resolved to make a few (quite amateurish) observations, and to trust to coming back one day to check the result.

Accordingly, at the end of August of that year with Fridolin Kronig and Heinrich, his son, I set out one morning for the Bétemps hut, having decided that the Grenz Glacier would be a very convenient one to experiment on. After bolting a hasty lunch at the hut, we scrambled down the moraine on to the glacier. I had better here explain that what I intended to do was to erect a straight line of rock cairns at 100 mètres interval right across this glacier from the Monte Rosa side to the far side on the Breithorn Massif, to leave them for a year or two to the tender mercies of their icy host, and then to come back and see what had happened. As a matter of fact, this plan had to be somewhat modified, as it was a bigger job than we had bargained for, and eventually we only completed a line of 630 mètres in length, but this turned out to be quite long enough to provide some very interesting, and, I must confess, to me, startling data. Let me here at once say that I approached the question in complete ignorance of the nature and habits of glaciers, unfortunately never having read a book about them, an omission I shall certainly retrieve, and merely with the curiosity of the average tourist, so that these notes cannot claim to have the slightest scientific value. To continue the narrative of our operations on the glacier; a large flat boulder on an ice-table determined the starting point of the line 'A,' and a small cairn was speedily built on the centre of this boulder, in which a wooden post, about 5 feet long, was duly planted. Writing from memory, I should say this point 'A' was about 80 to 100 yards from the moraine.

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Seven cairns marked A to G were built exactly 100 mètres apart, and between them, every 25 mètres, a large flat stone, with a little one on top, was placed, the distances being accurately measured and re-measured with the rope. The last thing was to check with a Zeiss glass that the posts, built in the cairns, were in exact alignment. The eighth, or farthest cairn 'H,' was erected only 30 mètres instead of 100 beyond 'G,' or 630 metres from the starting post, as this particular point on the glacier was the 'skyline' from the hut at the time, and any further cairn would not have been visible. The idea of carrying the line as originally intended right across the glacier had to be abandoned, as it would have taken at least two more days to complete it. Rocks had to be dragged (with a sledge belonging to the hut) hundreds of mètres across the rough sloping glacier, and though we worked till late at night, and all the next day, and Heinrich performed prodigious feats in rock-lifting, etc., we realised that cairn 'H' was the last we could possibly erect in the time at our disposal.

At the near end of the line, about 40 mètres N.N.W. of the hut, two 'sighting posts' to mark permanently the direction of the original 1918 line were set up. These were built firmly into large cairns which we hoped were solid enough to withstand all tinkering from stray visitors to the hut. As a last check before we left, we assured ourselves with the Zeiss that the two 'sighting posts' and all the eight posts were in exact alignment. It certainly never occurred to us that in less than forty-eight hours this hard-won alignment would have gone.

In August, 1920, I was again at Zermatt, and naturally made some inquiries about the cairns. Nobody that I asked had seen them, and they had apparently disappeared, snowed under, I supposed, by the immense fall of snow that must take place up there. The object of the posts was at least to show their tips, I hoped, out of the covering layers of snow. However, when I got to the hut I was much cheered by a note in the visitors' book written by an American gentleman, who, being stormbound for two days at the hut, and noticing my note of 1918, had spent his time roaming about on the glacier, and had actually found four of the eight original cairns, and three of the posts. There was not much time to explore that afternoon, but I determined to make a day of it later on and to begin the search for the cairns by working backwards from 'G' and 'H' towards the hut, as these

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two could be located without any difficulty. This plan of working backwards towards the hut succeeded well. A few days later, with a friend from Zermatt, the Rev. P. Lancaster, and with a large party of enthusiastic Americans who joined us at his invitation—the party included a surveyor with instruments of precision—we made a bee-line up the glacier for cairn 'H' and from there, working backwards towards the hut, the search began. Not only was every cairn located and rebuilt where necessary, not only was every post except two discovered and replaced, but to my great surprise every one of these intervening flat stones was identified, each with its little stone still on its back, just as it had been placed two years ago. Each successive find was announced by a young American on ahead with a loud shout, and our party of about twenty straggling across the glacier gave the impression of a tremendous game of hunt-the-thimble. On getting off the glacier and up to the Bétemps hut we found that the two sighting posts had gone; they had evidently been too much for the fidgety fingers of the tourists who visit the hut in such numbers. The posts had been worked out of their sockets in the cairns and had disappeared, though the cairns themselves were bulky enough to have withstood these attentions. However, I had provided for this contretemps by bringing up two fresh posts which had been specially prepared with strong cross-pieces nailed on to the bottom, and these were duly built in to much reinforced cairns, averaging, I suppose, about a ton apiece. It is fairly certain that no direct pull will get them out.

And now came the proof of the experiment. It was very easy, marching out over the glacier, directed on a straight line by an observer at the 'sighting posts' and accurately counting the paces to get to the exact spot, or certainly to within a very few feet of it, where cairn 'H' was originally built in 1918. It was then only necessary, of course, to pace down from this spot to its new position to find out how far this part of the glacier had travelled. And how much was it? On this alignment no less than 331 yards. This figure tallied very closely with some calculations the American surveyor made with the help of his instruments and the Siegfried map. In other words, cairn 'H' had moved on an average nearly one yard in every two days. Measurements to other cairns showed that 'H' was the outside of the circle, and moving the fastest. 'C' had moved 226 yards from its 1918 spot, and 'A,' the right-hand post of the line, about 120.

Two points occur to me. What happens to all the snow

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that must fall up there? The basic idea of sticking posts in the cairns had been that perhaps their tips might just sufficiently peer out of the snow to indicate where the cairns lay concealed below. So far from this being the case, every flat stone was actually there just as exposed as it was when placed there two years ago, though surely many feet of snow must have fallen in the meantime. Would they be ever visible in winter? Surely not, for some of the snow must lie till well into late spring or later. But by August, apparently, the glacier surface becomes the same as it was two years previously, without even a quarter-inch added to it as far as I could see, judging by these stones. Supposing you left a handkerchief on the glacier, and it was not blown away by the wind, how many years would it be before it got covered up? The cairns will travel down till they end by toppling over into one of those rivulets that seem, according to the Siegfried map, to be permanently there. One of these rivulets was very big and broad last year, a regular brook, and it had to be crossed by planks. This is the first obstacle, as things are at present, to be encountered. Poor 'H' is heading towards it at a fearful rate and will certainly get swallowed up in another ten years or so, always provided that no fresh stream opens up on the glacier higher up. 'C' and the others are pushing along more leisurely and will certainly survive impetuous 'H,' while 'A' may quite possibly see us all out.

But it would be interesting, now that it seems that these cairns do not intend to play hide-and-seek with us but can always be picked up by a little searching, to keep an eye on them a few years longer, and may I appeal, therefore, to anyone who happens to find himself stormbound at the Bétemps hut, with time hanging heavily on his hands, to just take a cast round over the glacier and see how these old gentlemen are getting on? It may be necessary to build up a cairn a bit, and, if it is still there or thereabouts, to replace the stick. To find out at any time the distance the cairns have travelled it will only be necessary to pace down to them from a point on the original line, and the direction of the latter is shown by the 'sighting posts' near the Bétemps hut. As an additional check, the original 1918 line bears 270° magnetic N. from the sighting-post cairns. Even if the sighting posts themselves have again been removed—and as I said above I have tried to make this operation a little more difficult—the cairns into which they were embedded will always be there to mark the spot, so that all necessary data are available. To any who are blessed with plenty of energy, may I

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suggest that they might add some more material to some of the cairns so that they become visible to the naked eye from the Bétemps hut, or to a telescope from the Gorner Grat ? To scientists and to all those long familiar with glacial phenomena, I fear all this will appear very childish and vain, and an apology perhaps is really due to them ; to us others who look at a glacier merely with the amateur's eye of interested curiosity, the sight of these helpless cairns being majestically carried along to their doom in the icy grip of destiny raises a spectacle of weird fascination, which it is not exactly easy to describe, but which I shall put forward to readers of the ALPINE JOURNAL as my excuse for having penned these incomplete notes.

THE CHASM, BUCHAILLE ETIVE, GLENCOE.

THE following notes were made during an ascent last Easter with my wife and Mr. R. F. Stobart. Left Kingshouse Inn 4.30 A.M., April 13, 1920.

Pitches.	Remarks.	Elevation (by Aneroid).
1	Entered chasm 6.15 A.M., 3 chockstones above one another. Wet. Easy.	1150 ft.
2	30 ft. Very wet. Climbed on right of chock-stone. Moderately difficult.	1240 „
3	Big cave pitches turned on right wall. Steep,	1300 „
4	loose, and heathery. Moderately difficult.	1380 „
5	8.45 A.M. 60 ft. of treacherous, slabby rock (red). Moderately difficult. Stretch of snow to next pitch. Huge schrund. Branch gully running up on left.	1420 „
6	9.15. Wet. Easy. Snow.	1520 „
7	9.50. 100 ft. of rotten rock, climbed by chimney on right. Moderately difficult. Breakfast 10.20. Steep snow to next pitch. Branch gullies leading out right and left.	1600 „
8	100 ft. Climbed on right of waterfall. Very bad landing. Severe.	1800 „
9	Small cave pitch, turned on right wall (looking up). Easy. Stretch of snow to next pitch.	
10	Combined tactics necessary to get on to smooth right wall. Severe. Stretch of snow. Branch gully on right to gap below pinnacle on 'Four Days' Ridge.'	2100 „

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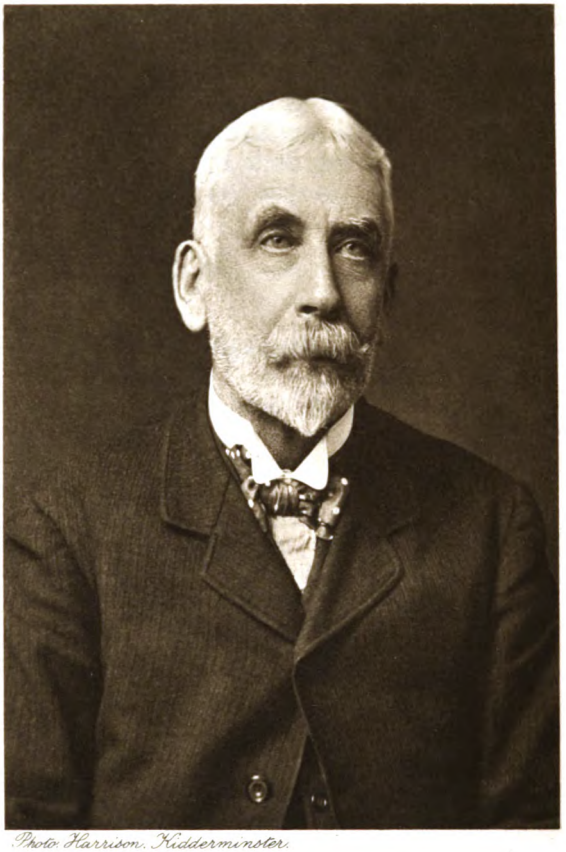


Photo: Harrison, Kidderminster.

Edward A. Broome.

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Pitches.	Remarks.	Elevation (by Aneroid).
11	'Devil's Cauldron.' Climbed by slabs and chimney on right wall (looking up). 120 ft. Severe.	2520 ft.
12 13	Snow-masked. 5.20 P.M.	2900 ,, (top of climb).

Back at Kingshouse 8.30 P.M.

The elevations given were taken at the foot of the respective pitches. Right and left indicate looking up.

We were unaware this climb had been completed before, until I found later that Mr. Harold Raeburn and Mr. W. N. Ling had made the ascent throughout on May 5, 1906, the lower portion being under deep snow, after Mr. Raeburn had on a previous occasion climbed the upper half and the lower half had been climbed some years before by another party. This is not given in 'British Mountain Climbs,' published in 1909.

N. E. ODELL.

IN MEMORIAM.

EDWARD ALFRED BROOME.

1845–1920.

IN Edward Alfred Broome, who died at Zermatt on Sunday, August 29 of last year, the Club loses a very active and devoted member.

He was born on July 31, 1845, of an old Worcestershire family closely connected with the carpet-weaving industry in Kidderminster and neighbourhood. He was trained under his uncles, Sir F. Crossley and Mr. John Brinton, and then started the Castle Mills in Stourport, building up a large business, of which he remained the head to his death.

An ardent musician, he was a well-known figure at the 'Three Choir' and other festivals. He possessed a good baritone voice and was a fine performer on the organ—indeed, one of his occupations just before his fatal seizure was to teach, with many forceful exhortations, his granddaughter, Ursula Corning, to play the organ at the English Church at Zermatt.

He was a good man to hounds in his day, and at his death the father of the Worcestershire Hunt.

He was a good citizen, a lieutenant in his county Yeomanry from 1886 to 1895; served as High Sheriff in 1902 and was a D.L. and J.P. for Worcestershire.

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His business ability was recognised by his appointment as shareholders' representative on the audit of the G.W.R., in which he was a large shareholder.

It is, however, with his mountaineering career that we have mainly to deal.

He was, as indeed he remained almost to the end, a prodigious walker, and he had acquired in the hunting-field that quick decision, that calm appraisement of difficulty and danger which stand one in good stead on a great mountaineering expedition. He possessed, moreover, great reach and strength in the hands and arms. He had in earlier years scrambled about the Scottish and Welsh peaks as then known to climbers.

Thus, although he was forty-one when he started mountaineering, he was not nearly so handicapped as one would be led to expect, while his constant physical fitness and an iron constitution account for the tireless energy with which he continued to make great expeditions up to well beyond seventy years of age.

He was able, during a climbing career of nearly thirty years, to carry through a series of expeditions that has been rarely equalled. He was mainly a centrist, oscillating between Chamonix and Zermatt, and had made, many of them several times, all the principal expeditions in those districts.

In 1891 he visited the Engadine, in 1894 Dauphiné. In 1897, however, he fell a victim to the glamour of the Dolomites, and in the course of seven visits acquired, with such leaders as Toni Dimai, Dibona, Verzi, Pompanin, a knowledge of the most difficult Dolomite climbs, probably as was possessed by no other English climber.

His list of expeditions, for which I am indebted to his daughters, Mrs. Corning and Miss Phyllis Broome and to Professor Corning (one or more of whom were his constant companions on many of his Alpine journeys[1]), and a rough list kept by himself, of which he evidently was, and had good reason to be, proud, is so instructive that it is well worth recording here. I must not forget my debt to my friend Mumm's *dossier*.

1886. Breithorn, Théodule, Col du Géant, Mont Blanc.

1888. Aig. du Midi, Cols de Talèfre and du Géant, Monte Rosa.

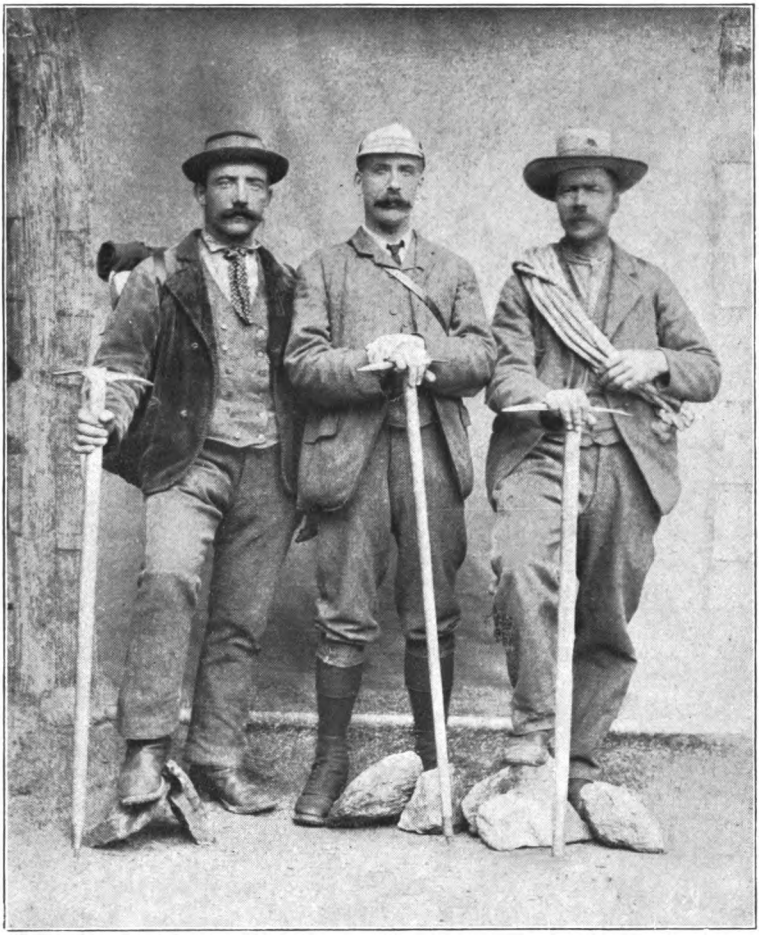
1889. This year is memorable for his engaging Joseph Marie Biner of St. Nicolas, who remained his leading guide every year until 1900, even in the Engadine, Dauphiné, and the Dolomites. It is to Biner's enterprise and sound knowledge, added to the determination, daring, and endurance of his employer, that much of the success of the magnificent series of expeditions carried out in those years must be ascribed.

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[1] Mr. H. W. Holder climbed with him in 1889, 1891, and 1894. The association was broken by Mr. Holder's two campaigns in the Caucasus.

The late P. A. L. Pryor was his companion in 1897 and 1898. In 1900 his future son-in-law, H. K. Corning, was his comrade for the first of many seasons.

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JEAN BURNET E. A. BROOME JOSEF LAUBER

ZERMATT, 1888

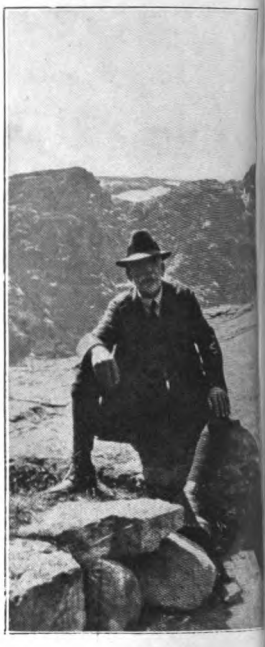
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1 A. POLLINGER
2 H. K. CORNING
3 MISS BROOME
4 E. A. BROOME
5 J. POLLINGER

1 2 3 4 5

1915



1915



Photo Canon Kidd

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Biner, a year older than his employer, survived him two months. He was already known as a bold climber. In 1878 he led Mr. P. W. Thomas in an attack on the Mittellegi arête, when they got as far as the great gendarme. In 1885 he and Alexander Burgener were the guides of Herr v. Kuffner on the *descent* of the same ridge. Burgener knew what sort of man Biner was before he chose him for such an adventure.

Biner very soon justified his engagement with Broome. With P. J. Truffer as second they made inside a month the following expeditions:

Triftjoch, New and Old Weissthor, Dom, Rothhorn, Rimpfischhorn, Weisshorn, Dent Blanche, Matterhorn (traverse Breuil to Zermatt, with A. Ritz in place of Truffer).

'Biner never attempted anything that we did not succeed in doing, notwithstanding most uncertain weather and the difficult state of some of the peaks.'

1890. Charmoz, Grand Dru, Géant, Tacul, and some passes; Obergabelhorn, Täschhorn from the Mischabeljoch, Felikjoch.

1891. Piz Roseg, Morteratsch, Disgrazia, Monte di Scerscen—Piz Bernina, traverse with descent by the Bernina Scharte, the first time the two peaks were done in the day and probably the second traverse in this direction, an expedition of nineteen hours. The local guide was Joh. Gross. I remember Broome telling me that when they got into the Scharte which, through Dr. Güssfeldt's somewhat coloured description of the first ascent, had a great but quite undeserved reputation, Biner, who was last, untied himself and climbed the short pitch to the Pizzo Bianco with the greatest ease.

1892. Cols du Géant and des Hirondelles, Grandes Jorasses, Mont Dolent, Charmoz, Grépon (possibly with other guides), and an attempt on the Aig. Blanche de Peuteret from a gîte on the Fresnay-Broglia arête, 14 hours from Courmayeur. The intention was to repeat Sir Seymour King's ascent of 1885. Emile Rey led Broome as he had done King. Broome told me that soon after they started they saw that, while they could reach the summit, they would be compelled to bivouac a second night, for which they were not prepared, having sent the porters down, so they turned back.

1893. Mont Blanc (traverse from Cabane Sella), Grivola (Val Savaranche to Cogne), Grand Paradis, Aig. Verte, Petit Dru, Aig. d'Argentière, Périades, Aig. Noire de Peuteret, and the first passage of the Col de l'Eboulement ('A.J.' xvi. 514, and xvii. 65). Auguste Cupelin, then possibly the best all-round Chamonix guide, took part in the Chamonix ascents, while Emile Rey was the leader on the Aig. Noire.[2] It had in those days a great reputation, and was

[2] I noted the names on the summit:

1879—Del Carretto; 1889—W. Muir; 1890—K. Richardson, F. Gonella; 1893—Foley, Wilson Morse and Wicks, Güssfeldt, Broome, Farrar. The first ascent was made by Lord Wentworth with Rey and J. B. Bich in 1877.

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a sort of preserve of Rey's, who had led every expedition but one, even the redoubtable English trio mentioned in the footnote, then at the zenith of their great career, deigning to take him along. There was one place where he used to throw a rope. Biner watched the manœuvre, and, untying himself, climbed the place in great style. Emile had rather a way of not giving away his pet ascents. I think the tariff was 90 or 100 francs, and, as I note from my book, that Daniel Maquignaz, who had never seen the mountain before, led me, without a check, from the foot of the rocks to the summit in a few minutes under four hours—it was a good milch cow.

1894. Pic Coolidge, Meije (traverse), Ecrins (traverse), Gde. Ruine (traverse), Gde. Aiguille. (Mr. Holder and Alois Pollinger II took part). An attempt was made on the Col du Mont Dolent, but the icefall at that date (August 31) defeated them. Broome also slept out for the Brenva arête, but the weather prevented a start next morning. This was the first of *two* starts for the Brenva, both defeated by weather.

1895. Egginer, Laquinhorn (traverse), Südlenz-Nadel-Ulrichshorn, Weisshorn, Dom (traverse from Fee to Randa), Weisshorn (1st complete ascent from the Schallijoch by the Schalligrat, 'A.J.' xviii. 145).

1896. Col de Rochefort (2nd recorded passage), Aig. du Moine.

1897. Croda da Lago, Cristallo, Kl. and Gr. Zinne, traverses of Popena, Sorapiss, and Croda Rossa; Fünffingersp., Rosengarten, Langkofel, Grohmansp. (traverse), Cimone (traverse), Cima d. Madonna (traverse), Canali (traverse).

1898. Sass Maor, Pala di S. Martino, Col Dolent, Col des Gdes. Jorasses, Grépon (traverse), 2nd attempt on Brenva route, Mont Blanc (from Dôme hut), Aig. du Géant, Aig. Rouges d'Arolla (traverse), Za, Rimpfischhorn, Täschhorn (Teufelsgrat).

1899. Croda da Lago, Drei Schuster, Kl. Zinne (N. face), Popena (S. arête), Tofana (via Inglese, new S.E descent), Ortler (Marltgrat) and, with Miss Sylvia Broome, now Mrs. Corning, and Biner, Croda, Kl. Zinne, Cinque Torri, Ortler (Hinter Grat).

1900. Petit Dru, Charmoz, Triftjoch, Rothhorn (traverse from Zinal).

1901. Kl. Zinne (traverse), Antelao (S. face), Croda Rossa (E. face), Pelmo.

Alois Pollinger II now became leading guide, and rendered to the last brilliant services. In the Dolomites, local guides only were employed.

1902. Trifthorn, Monte Rosa (from Lysjoch), Col de Moming and Rothhorn, Lyskamm (Lys- to Felikjoch), Mischabeljoch, Rothhorn to Mountet, Gabelhorn to Zermatt, Riffelhorn (1. up Glacier down Matterhorn couloir; 2. reverse).

1903. Charmoz (N. to S.), Requin, Blaitière (S. and Central peaks), Riffelhorn (up Krachenloch down Glacier), Trifthorn-Pic de Mountet-Rothhorn, Schallihorn (from Schallijoch) and Momingsp., Wellenkuppe-Gabelhorn ('A.J.' xxii. 255) 'The Rothhorn Ridge.'

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1904. Col des Nantillons, Mont Blanc (Midi route), Aig. de Rochefort (asc. from S. side)—Mont Mallet, Matterhorn (Zmutt arête), Gabelhorn (S. face—W. arête), Nordend (N.W. arête)—Dufourspitze (N. face—S. face).

1905. Charmoz (S. to N.), Moine (N. to S.), Grépon, Triftjoch and Trifthorn.

1906. Traverse Delago-Stabeler-Winklerthürme, Tscheinersp. (W. face—1st ascent), Rosengarten (S.E. face), Fünffingersp. (1. Schmittkamin and 2. Daumen Scharte), Teufelswandspitze (1st ascent 'extremely difficult'), Marmolata (S. Wand), Diamantidithurm, Cristallo (S. Grat).

1907. Tour Ronde, Cols de Rochefort et du Géant, Dent Blanche (Ferpècle arête—Wandfluh), Monte Rosa (5 peaks).

1908. Laurinswand, Vajoletthürme (N. group), Rothwand, Marmolata (S. face) and others.

1909. Breithorn (N. face), Unter to Ober-Gabelhorn, Rimpfischhorn (from Adler), Trifthorn, Riffelhorn (up Krachen down Glacier).

1910. Becco di Mezzodi (N.W. face), Sorapiss (Müller—Grohmann Wege), Gr. Zinne (Ostwand), Nuvolau, Col Rosa, etc.

1911. Leiterspitze, Cols de Valpelline, des Bouquetins and d'Hérens, Nordend (from Macugnaga), Täschhorn.

1912. Rosetta (S.W. face), Cimone, C. della Madonna (Phillimore-Winkler routes), Pala di San Martino, Camp. and Cima di Val de Roda, Marmolata (S. face—his 3rd ascent), Rothwand, Winkler-Stabeler-Delagothürme.

1913. Allalinhorn, Aig. de la Brenva, Aig. Noire de Peuteret (his 2nd ascent).

1915. Alphubel (Rothengrat), Monte Rosa.

1919. Buet, Tour Noir, Charmoz (traverse 14 hrs.).

Such a consistent list of great expeditions would be hard to beat. The expeditions which appealed to him most were his ascent of the Weisshorn by the Schalligrat in 1895 and of the Obergabelhorn by the long arête from the Unter Gabelhorn in 1909. Of all his Dolomite climbs the Marmolata Südwand held his heart. He had done it three times.

The critical mountaineer will note with interest other great ascents, such as the traverse of the Dom from Fee to Randa in 1895, the Col Dolent in 1898, and the feat, unrivalled in the history of mountaineering, of traversing in his 67th year, roped to a single young guide, the Nordend from Macugnaga, 'the great white throne of the Revelation,' as he loved to call the East face! He had been warned a few days previously that he ought to consider his climbing days over. Yet in 1912 he broke out again, and as late as 1919, when in his 75th year, traversed the Charmoz.

Surely such a climbing career stands out by itself beyond compare.

His contributions to the Journal were numerous, commencing with Vol. xvi. and ending with a paper on 'Zermatt in War Time' in Vol. xxx. Many of the papers were read before the Club. They were full of delight in the climbs which a good voice and delivery

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graphically conveyed to his listeners. He was also a frequent speaker at the meetings. One never quite knew what he would say when he got well launched, and this, of course, ensured him an attentive audience. One was anyway certain of a more or less appropriate Biblical quotation and generally of a racy tale.

He was elected to the Club in 1889, to the Committee in 1900, and became Vice-President in 1912. In the spring of last year a dinner was given to him by some thirty of his friends in the Club, and the speeches were some indication of the warm affection in which he was held.

He was heart and soul in the Club. We were all his friends. Just as one remembers and misses the firm handshake of C. E. Mathews —the genial greeting of Charles Pilkington—the innate candour of a Woolley, the presence of many another good man, so will the place of Edward Broome not be filled at our meetings and in our hearts.

I forget when I met him—I always seem to have known him, but comparison of diaries show that it was at Courmayeur, August 14 or 15, 1898. I was a rabid ex-centrist and so our orbits had not previously touched. I remember looking with some interest at the lean, active Englishman, of whom I had read and heard much. From that day onward our friendship had that supreme quality that, however long we were apart, we started afresh exactly where we had left off. Besides the great tie of the Club I felt his innate loyalty.

No stauncher friend lived, there could be no more harmonious or joyous gatherings than those at which he loved, so often, to preside. He was not without his prejudices and was quick to take offence, but even quicker to meet any attempt at a rapprochement. I remember one notable instance of a generosity of spirit of which not many men would be capable.

At the houseparties at Areley where Mrs. Broome, a great raconteuse, saw that our spirits never flagged, at Pen-y-Gwryd where each Easter we made up a joyous crowd, the words he himself once wrote could well apply: 'Men are boys writ large. What overgrown school-boys most of us are,' and he was the gayest and most boyish of us all.

He started on his last journey to his beloved Zermatt at the end of July, full of the old spirit. Twenty-one days before the end there is one last, almost pathetic, entry: 'To the ridge of the Riffelhorn—alone.' We can picture the veteran, young as ever in spirit, looking round that mighty panorama, surely unrivalled in all the world, at the ridges and faces and summits he knew so well. And so he returned to the Zermatt of his first climbing days of thirty-five years ago, to his almost home, the Monte Rosa, to die.

His own physician, Dr. O. K. Williamson, and Professor Corning, aided by the able local doctor, saw to everything, while Madame Imfeld, who now reigns at the Monte Rosa as she did in the old days at the Zermatterhof, was kindness itself. We see him in Canon Kidd's picture a week before his death, gay of spirit as ever, chatting to Mrs. Pasteur. An exquisitely characteristic tale is told of him.

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Almost on the last day he was found emptying his physic-bottle into the slop-pail: 'Confound all their concoctions—I am sick of this everlasting cackle of drugs and bed. Still, O. K. is such a good chap—mustn't hurt his feelings.' He died a true mountain death, without ever growing old in heart and mind, wrapped up in his beloved mountains to the last, soothed as ever by the presence and the never-failing care of his loved ones.

As the day waned he was once again making a great traverse. 'To within an hour of the end he thought we were climbing and was urging us all to "come on—come on." May heaven give at least some others of us as beautiful and peaceful an ending in a place we love as well, and may we be all as sincerely mourned!'

He was buried beside the English Church, where he had always wished to be, at which in the early days he had acted for several seasons as organist and choirmaster, Canon Kidd of St. Albans taking the service at Miss Broome's request.

We are glad he is there. We will not fail each time to stand a moment by the grave. We know he knows we'll not forget.

And so passes a man, warm in heart, generous in spirit—a right valiant mountaineer.

J. P. F.

F. W. BOURDILLON.
1852–1921.

FRANCIS W. BOURDILLON had been a member of the Club since 1900, but he first began to climb seriously in 1893, when he was already forty-one years old. From that time onwards he spent nearly every summer in Switzerland from early in July to September. There have been few more earnest and devoted lovers of the Alps than he, for to a man of his receptive, sympathetic, and poetic temperament the majesty and solitude of the mountains had an irresistible attraction.

But he liked to enjoy the mountains in his own way, and that way led to much solitary climbing and climbing without guides. In his paper 'Another Way of (Mountain) Love,' read before the Club in May 1906, he tells in his charming and cultivated prose how it was that he came to shun the conventional summer mountain holiday spent at centres and in big hotels. This led him to try the experiment of hiring a chalet for the summer and staying there for two or three months with his family and some friends. He first did this at Champéry in 1897 after three previous seasons in the Alps, during two of which he climbed with E. J. Garwood, who afterwards proposed him for the Club. After two summers at Champéry he experimented on chalets at Engelberg and Grindelwald. The first he found relaxing and full of Germans of such ample proportions that he—though a thin man—found difficulty in passing them on the mountain paths. The second was too full

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of excursionists, and the big mountains made him rather dissatisfied with the smaller climbs which appealed more to him as being suitable to a man who preferred to be alone or with friends and without guides. But he climbed the Schreckhorn when he was in Grindelwald in 1902, and the Jungfrau, Wetterhorn, and Finsteraarhorn in 1905.

Afterwards he spent many summers at Champéry, which he found to be a most convenient centre for the kind of climbing he enjoyed, and where it was easy to find a suitable chalet and there were no difficulties about provisioning the household, and servants could be easily obtained.

But he visited also the Engadine, the Tarentaise, Maderanerthal, the Zermatt district, and in 1908 spent some time at Arolla and in the Val de Bagnes. On a good many of these expeditions among the bigger mountains he was accompanied by his friend Professor Garwood.

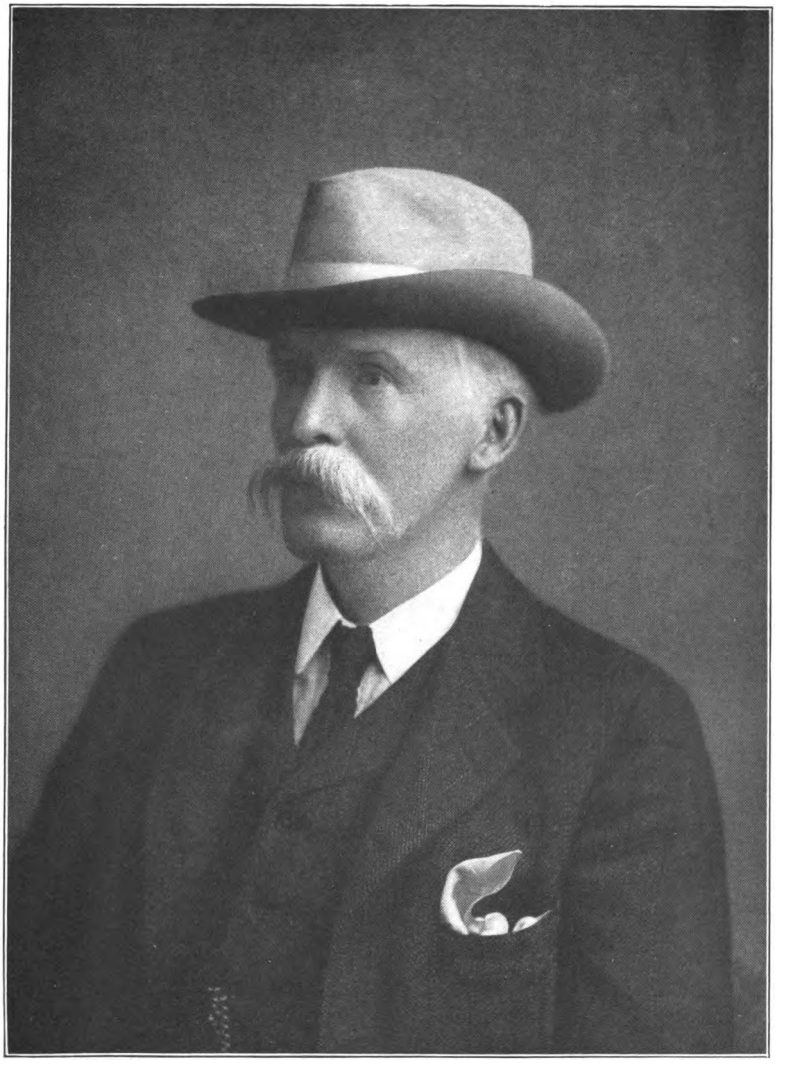
He detested the vulgarization of the mountains as evidenced by the numerous mountain railways built in Switzerland in recent years. This made him an active member of the Heimatschutz and induced him to read another paper to the Club in April 1913—'Without are Dogs,' which inveighed against the multiplication of unnecessary mountain railways and revived the sentiments which he had expressed so well in his 'Ode in Defence of the Matterhorn against the Proposed Railway to the Summit' in 1910. Few papers which have been read to our Club have expressed more vividly or in more graceful language the feeling that the real mountain-lover has for the vast solitudes of the Alps.

Although during the last fifteen years when we have been neighbours I have seen a good deal of Bourdillon, as our mutual love of mountains formed a strong bond of common interest, I only climbed once with him and that was at the Eagle's Nest in 1913. He came over to us from Champéry and I took him up the Pointe de Salles by a very steep and slippery face route. That one walk was enough to show me that he knew quite as much about climbing our limestone mountains as I did myself, and that cautions against slipping on steep grass slopes were quite unnecessary. He was quick, had an excellent balance, and certainly a better head on steep places than I had myself. I shall always remember his keen enjoyment of the beauties of the mountain and the splendid view of Mont Blanc from the top.

For he was a real mountain-lover, and the grandeur and solitude of the Alps brought out to the full his poetic and cultivated appreciation of their charm. He was always a delightful companion and friend both in the mountains and at home.

But Bourdillon had other interests besides the Alps, though the same qualities which made him love mountains no doubt were responsible for his keen literary sense and his graceful versification. Beginning in 1878 with 'The Night has a Thousand Eyes,' he published also 'Through the Gateway,' 'A Lost God,' 'Sursum Corda,' 'Preludes and Romances,' 'Christmas Roses,' and other volumes of verse. But he was best known as a literary man for

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F. W. BOURDILLON

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his work on the old French Romance 'Aucassin et Nicolette.' He published in 1887 a text and translation in prose and verse of this work, and later revised it, the English translation being frequently reprinted, and in 1896 he published a photographic reproduction of the original manuscript. He also brought out for the Bibliographical Society in 1906 a very complete monograph on the early editions of the 'Roman de la Rose.' He had a very fine library, and among his books were many of the rarest editions of these romances, and nothing gave him more pleasure than to show these to his friends.

He was devoted to the county of Sussex, and particularly the beautiful neighbourhood of Midhurst, where he lived almost all his life. Like so many other members of the Club, he was extremely fond of long country walks and bicycle rides during the months that he could not visit his still more favourite mountains.

He was the son of a former rector of Woolbeding, the Rev. Francis Bourdillon, and after going to Haileybury and Oxford he for three years was resident tutor to the sons of the Prince and Princess Christian. He then for some years coached for the Universities at Eastbourne. But devoted as he was to the Midhurst country, he took an early opportunity of building himself a house within a mile of Woolbeding, and there he lived until his death last January.

W. A. W.

THE news of the death of F. W. Bourdillon was received with great sorrow by the guides and inhabitants of the village of Champéry. Since 1897 he had been a constant visitor, and year after year his arrival has been looked for; those seasons when he did not come never seemed quite complete.

His first expedition here was in 1897, and continued through the intervening years till 1919. He was chiefly interested in finding new routes up the lesser-known peaks in the district, and made the first ascent of the Haute Cime of the Dent du Midi by the N. face on August 20, 1901, with Edouard Defago as guide. They proposed to make the ascent of the Doigt de Champéry, but after climbing several hours found their way barred by iced gullies and bad rock, so they went straight to the top of the Haute Cime.

Bourdillon writes: 'We soon forsook the usual Dent du Midi route and climbed straight ahead to the left, till we got to the side of a narrow but steep gully filled with ice. We crept up the side of it, ever up and up, on bad rocks, and at last crossed it and came to a small col joining a rocky knob to the main Haute Cime massif.' From this point they went straight up the rocks to the top. Time from the grass slopes of the Seleyre ridge, 6 hours.

He also made the second ascent of the Forteresse by the N. face—guide, Edouard Defago, August 2, 1904. He writes: 'We left the chalet of Anthémoz at 5.45 A.M., climbed snow to the foot of the couloir leading up between the Cathédrale and Forteresse.

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Then a long rock climb with several chimneys.' Time from Anthémoz to the summit, 5 hours 25 minutes.

During twenty years I had the great pleasure of being his companion on many of his climbs. He was an ardent lover of all mountains, and of tireless energy.

Here, where the old instinct of true hospitality to the tourist and true affection and gratitude to the old client holds good, his death seems like a real severing of one of those strong ties which bound England and the Alpine Club to the real Switzerland of the days before the cheap tours and mountain railways.

CHAMPÉRY, *March* 2, 1921. JOSEPH COOKE SMITH.

WILLIAM ASBURY GREENE.

1848–1920.

WILLIAM ASBURY GREENE was educated at St. Paul's School, lived at Richmond and practised as a solicitor in Bedford Row.

He had rheumatic fever in a severe form as a young man, but recovered to climb with success from 1872 to 1891, with the exception of a few years given to rowing tours at home and abroad.

I first met him in 1873 at Arolla, when he and the late Mr. W. B. Rickman were trying some of the best climbs in that and the adjoining valleys. They finished the season, with the guides Joseph Gillioz of the Val de Bagnes and Jean Vuignier of Evolena, by climbing the Dent Blanche from Abricola. None of the party knew the mountain, and no account was published. An account by Mr. Rickman is in existence, but it was not published. In 1884, with F. C. Mills, he climbed the Grand Cornier by a new route ('A.J.' xii. 122). In course of years he managed to climb all the Zermatt giants and most of the Grindelwald group, and visited the Wildstrubel, Tödi, and some of the minor groups of Switzerland. Further afield, in 1877, he and I visited Tirol in its primitive days, climbing the Gross Glockner, Cristallo, and Ortler among others. In 1888, he visited Dauphiné with Mills, and wrote an account ('A.J.' xiv. 372). In 1891, with Mr. C. M. Stuart, he visited the Pyrenees, climbing the Balaitous and Mont Perdu. These expeditions were practically the end of his climbing proper, as he became subject to mountain sickness when over 10,000 feet, and was ordered by the late Mr. C. T. Dent to give up climbing.

He rowed in the Twickenham R.C. Eight for some years, during the club's best days. In the middle 'seventies he and others sent a boat to the upper waters of the Danube and rowed down to Linz. Thence by rail across the watershed and down the rapid Moldau and the Elbe to Hamburg, then probably a new expedition.

He had bad health for the last ten years, following an accident

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W. A. GREENE
1888



F. WHELAN

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to his knee which left him lame for some time and prevented him from getting adequate exercise.

His pen-and-ink sketches of the mountains were much appreciated by his friends. Later on he became interested in the Camera Club.

His good nature, patience, and fairness made him an ideal travelling companion, and his friendship during the rest of the year was a privilege that will not be forgotten.

T. A. R.

FITZGERALD WHELAN.
1872–1921.

FITZGERALD WHELAN, affectionately known to his friends as 'Gerry,' was for many years Bursar of St. Columba's College, co. Dublin, where he was greatly beloved by both boys and masters. Owing to his residence in Ireland, and the fact that he was not able to go abroad very frequently, he was probably not known to many members of the Club, which he joined in 1902. He did some fine things in the Alps. With his brother (Rev. P. S. Whelan) and H. J. Synnott he traversed the Drus from the Montanvert, returning thither in time for tea. From Zermatt in another year he climbed the three chief peaks of the Nadelgrat in one day. I met him first at Zermatt in 1904, when he had just been over the Matterhorn (returning the same day by the Breuiljoch) which was in a difficult state after much fresh snow. We soon became friends, and I had the great pleasure of his company during a three weeks' campaign in Dauphiné in 1908. In spite of spells of bad weather, we did some of the chief climbs, though we were robbed of the Meije by a storm which made it almost an achievement to get from the Promontoire over the Brèche to La Grave. We had with us that accomplished guide—one of nature's gentlemen—the late Alphonse Simond. It was delightful to see how Whelan and he—neither as it happened speaking the other's language—got on together. There was a likeness in character and physical power and a community of interest and achievement that seemed to link them in a very striking way. Whelan himself was a skilful, fast, and daring climber, withal entirely reliable. I remember that on one bad day at La Bérarde, several parties were trying the face of one of the big boulders near the hotel. Whelan showed us three times how to do it—the third time was almost too much even for his strength—but no one could imitate him. He had remarkably strong hands, in spite of the loss in a shooting accident of one finger of the right hand, and he seemed to decide at once how to take a difficult passage. He had been a fine Rugger forward, and was a great cyclist who could do 100 miles in a day without turning a hair—and that on Irish roads. He had a fine baritone voice, was an admirable raconteur of Irish stories, and was steeped in Irish

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humour and brogue. Always unselfish and cheerful, and nearly always merry, he was the jolliest of companions, and his straightforward, loyal, and generous character made his friendship a delight to all who had the privilege of sharing it.

E. H. Stevens.

L'ABBÉ RÉMY FOUILLAND.

1853–1920.

Those of us whose foreign Alpine correspondence is considerable will feel quite a personal loss in the death of this distinguished member of the Section Lyonnaise of the C.A.F.

He had been for forty years a member of the C.A.F., and during thirty years the Librarian of the Lyons section. He was Editor of their *Revue Alpine* for some years, and it was in that capacity that we corresponded. I remember vividly the charming tone of his letters. We seemed to become, indeed, quite friends. He was a veritable apostle of the High Mountain among the youth whom it was his business to instruct, and was a worthy type of the cultured French priest which has shown in the late war that the cassock of the ecclesiastic so often covers the heart of a brave man.

J. P. F.

AUGUSTIN GENTINETTA.

1860–1920.

The announcement last year of the death of Augustin Gentinetta at Zermatt was received with a feeling of very sincere regret by his many friends of all nationalities. Not one of the Valais guides was more highly esteemed than he was, and with good reason.

One of a numerous family, he was born in 1860 at Glis, where his ancestors came to live in the middle of the sixteenth century. He was educated at the village school, and as a young boy his holidays were spent in looking after cattle on the surrounding alps. His schooling over, he was taught joinery and became in time a first-rate carpenter. As a mere boy he always looked with longing at the mountains, and whenever he had the opportunity he would spend the day scrambling wherever he could. In 1876, when he was a little over sixteen, his first opportunity of a real ascent occurred, and he accompanied the Rev. J. T. Bramston as porter up the Breithorn and down to Breuil; and the next day he, acting as third guide, traversed the Matterhorn from Breuil to Zermatt with another party under the leadership of J. A. Carrel. In the following year he had plenty of engagements and gradually got to know most of the Valais peaks. By 1879 he had gained a reputation as a really good climber and was engaged by A. F. Mummery for the season as second guide to Alexander Burgener. The party brought off a number

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of fine climbs culminating in the first ascent of the Matterhorn by the Zmutt ridge, on which Gentinetta led most of the way.

His abilities as a guide now became universally recognised, and he was much sought after by some of the best mountaineers of the day. His 'Book' contains a testimonial in 1882, signed 'J. P. Farrar,' after they had climbed the Matterhorn and the Dent Blanche, that he was 'a first-rate climber and one of the foremost of the rising guides of Zermatt.' Every year his reputation grew, and his 'Book' shows that he climbed with F. M. Balfour, W. A. P. Burnell, W. E. Utterson Kelso, Joseph Seiler, A. G. and E. H. Topham, F. M. Davies, H. Heldman, J. A. Luttman Johnson, E. Whymper, von Waldhausen, Lord Lovelace, D. Diamantidi, Dr. and Mrs. Thomson, H. W. Holder, G. E. Maude, H. Correvon, A. Milnes Marshall and many others, and that he visited the Oberland, Chamonix, Dauphiné, and Tirol.

In 1886–1889 he carried out a brilliant series of climbs with Ellis Carr and F. M. Davies, and during six consecutive years he and the late Franz Biner ascended with J. A. Luttman Johnson all the great peaks in the Zermatt, Zinal, Saas, Lötschen, Binn, Aletsch, Aar and Grimsel districts.

It was in 1889 that the present writer had the supreme good fortune to be taken on his first expedition—a crossing of the New Weissthor with a party led by Gentinetta. That happy day proved to be the commencement of a mutual friendship and regard which lasted for upwards of thirty-one years and has only been terminated by death. From that year onwards (except for one year) Gentinetta and Joseph Biner have acted as his guides, and together they have come all along the mountains from the Ortler right through Tirol, Switzerland, Chamonix, and Italy, as far as the Monte Viso, and altogether they must have spent together some 900 days of pure enjoyment without a single hitch or cross word.

No man can ever have had a better guide and companion than Gentinetta. He was a very fine and quick rock-climber, and equally good on ice and snow, while the speed with which he could cut perfectly safe steps was remarkable. He was wonderful in finding his way on a mountain which he had never seen before. Instinctively he saw the right way to the top, and from there the way down the other side. Without any fuss he took every care of his 'Herr,' never hurried him unnecessarily, and always let him do his own climbing unless help was really required. No day was too long, no weight too heavy for him. Wherever his wanderings took him, even in Tirol where foreign guides are not always welcomed, his good temper and cheerfulness gained him friends at once.

In the many hundreds of ascents he made he had only one accident. In 1900 after a successful ascent of the Matterhorn from the Swiss hut, his party were caught, in the couloir formerly used, by a heavy fall of stones started by a party above. The other guide, Alphonse Furrer, was killed on the spot, and all three were carried down several hundred feet on to the glacier. Gentinetta, though himself badly

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hurt, managed to extract his 'Herr' from the snow in which he was lying insensible and to carry him up the steep ice to a place of safety on the rocks some 400 feet above.

Gentinetta was very happy in his home life. He was devoted to his wife and numerous family, of which four sons and one daughter survive. Three of the sons have obtained their certificates as guides, but only one now acts in that capacity. The eldest, after a first-rate education at Brigue and Innsbruck, has become a priest and is now teaching at the College at Sion. All are doing well and are worthy sons of their father.

For some two or three years before 1914 Gentinetta began to be troubled with asthma, which gradually caused ever-increasing heart trouble. The writer naturally did not see him after the outbreak of the War until 1919, and then found him able to go only for moderate walks. When they parted in September of that year both felt that they would never meet again, and so it was. During the winter of 1919–20 the heart trouble grew worse and the end came on March 26, 1920.

Augustin Gentinetta is buried in the churchyard at Zermatt, and there lies in peace one of the best guides the Valais has ever produced—a true and faithful friend of thirty years.

C. H. R. W.

JOSEPH GENTINETTA.

1864–1919.

In their day, had I to indicate two guides who could be counted on in any emergency, I would not have hesitated to include the two brothers who appear side by side in those pages of this Journal which we dedicate to the memory of our own dead and of men who have served us well.

Augustin I had climbed with when he was a handsome young fellow of twenty-two, lithe and active as a cat, the down just sprouting on his face. Joseph I first knew in 1892—that year the brothers were my wife's guides on the Matterhorn. Caught near the summit by a furious thunderstorm, it was only the sang-froid of the brothers, added to the faith in them of the steadfast traveller, that saved a very dangerous situation.

I frequently met the brothers in subsequent years, and had for their characters and for their powers a sincere regard. The third brother, Emil, was likewise a good guide, but increasing weight has latterly handicapped him in his profession. He was the best weather prophet I ever knew.

Joseph was born in 1864 at Glis, above Brigue. All three brothers were master-joiners—good workmen—as was their father before them, and they were in intelligence and education quite different from the ordinary peasant. He was a well-made and very powerful man, while his frank, open look comes out well in the

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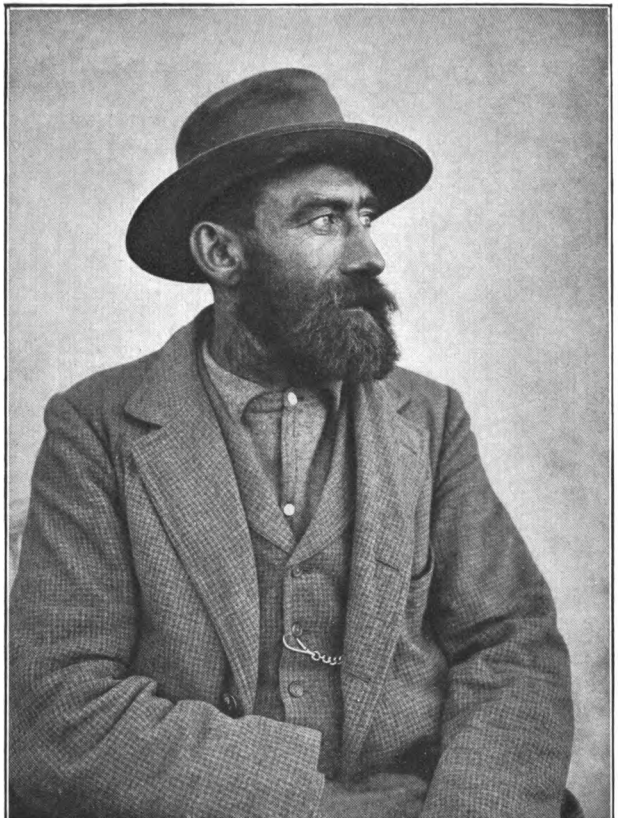
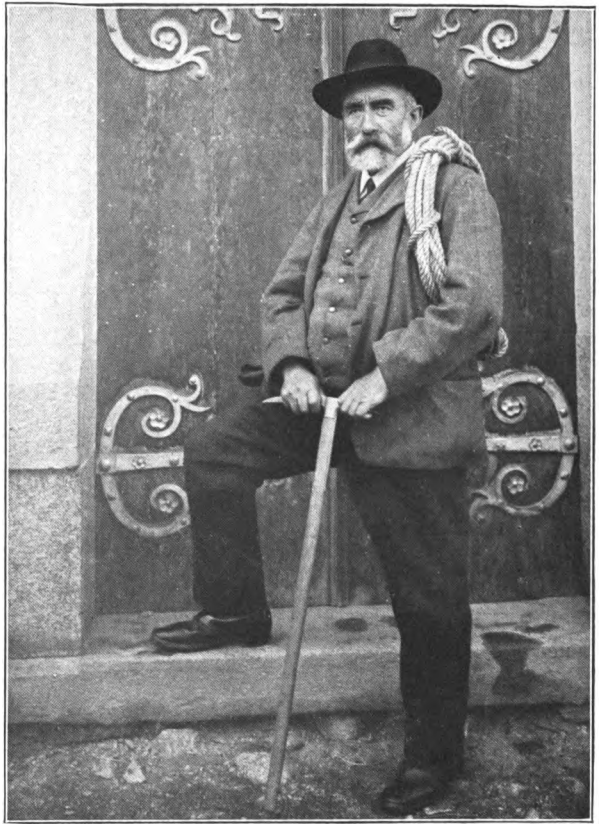


Photo H. Speyer]

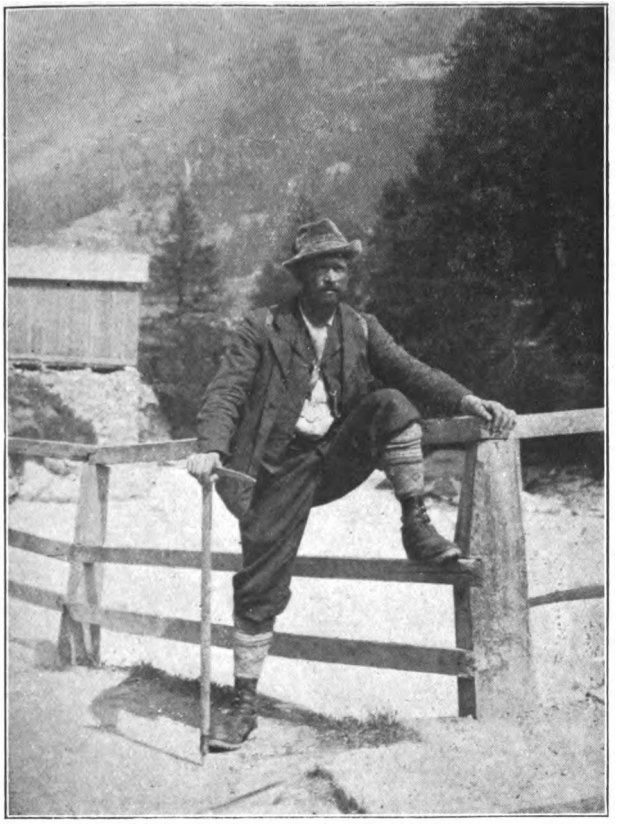
JOSEPH GENTINETTA

1901



AUGUSTIN GENTINETTA

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ANTOINE MAQUIGNAZ
1869-1920



J. M. BINER

(MR. BROOME'S GUIDE).

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portrait. His book now before me is mainly a series of testimonials by some of our own best-known men. It opens in 1887 with an ascent of the Matterhorn; then a party of boys with two masters from the Prangins school ascend the Cima di Jazzi, recalling to me a similar expedition fifteen years earlier, when I was one of the boys. Mr. Loppé then crosses the Schwarzthor and Lorria with Joseph, singlehanded, makes a splendid series: Nordend, Gabelhorn, Rothhorn, Matterhorn, Rimpfischhorn, Dent d'Hérens, Weisshorn, Lyskamm—fair for a guide of twenty-three!

By now his name was established, and, aided by the sound reputation of his elder brother, Augustin, he speedily became and remained for the rest of his working life the much-sought-after guide of some of our hardest men.

Looking through his book, I find the names of O. J. Koecher (several journeys); W. N. Tribe; A. Milnes-Marshall (killed later on Scawfell), who made six great journeys with him (1888–1893) covering the Zermatt district, Oberland, including Bietschhorn ('He is a most able guide and an extremely pleasant companion'), Chamonix (1893), including the two Dru, the Charmoz, Mont Blanc from the Sella hut (a slight variation near the summit), traverse of Cervin. In this campaign T. L. Kesteven, my companion in Dauphiné in 1894, a good mountaineer unfortunately long lost to the pursuit, took part.

Other names are Charles H. Peacocke; Harold B. Dixon; Herbert R. Arbuthnot (1893, 1894, 1896, 1901); W. Gilbert Edwards; J. G. Douglas Kerr (1895 and 1897); the party Gerald FitzGerald, M. Holzmann, W. E. Davidson (1894), including traverse of Cervin. 'In all these expeditions he proved himself a first-rate guide, and in addition he is a good-tempered, quiet, and most agreeable companion.' Godfrey W. H. Ellis, including Gabelhorn, Rothhorn (traverse), and Lyskamm; F. A. Satow; H. K. Corning (four years, 1897–1900), including the principal Zermatt peaks; Bietschhorn and Mont Blanc (Dôme route); von Waldhausen (1897–8–9–1900–1–2–3), including Chamonix Aiguilles, Combin, Oberland, Pontresina, Zermatt, Dauphiné (many great expeditions in each district); W. P. R. Ellis (1902–3); F. Wyatt-Smith (1904 and 1911), including Pontresina and Oberland; W. H. Ellis; H. v. Ficker; T. K. Rose; Ernst Pühn; v. Hahn; A. E. W. Mason; H. D. Waugh; E. G. Oliver and S. L. Courtauld (1908), including Wellenkuppe-Gabelhorn to Arbenjoch; R. A. Frazer; C. M. Thompson; W. P. Ker.

Such a series of names is testimony enough to Joseph's powers. He was a very fine and determined rock-climber, and a good all-round man. Early in 1919 he, who had never had a day's illness, was attacked by some abdominal trouble. An operation came too late, and he died in the November.

Many of us will not soon forget this sturdy and valiant mountaineer, and his frank greeting will be missed when we return once more to the old haunts. J. P. F.

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ANTOINE MAQUIGNAZ.

1869–1920.

ANTOINE MAQUIGNAZ died on December 26 from hæmorrhage, due to his accidentally shooting himself in the arm while out hunting. A younger brother by thirteen years of the famous Daniel, he got his early training under him, and possessed all that seemingly intuitive knowledge of mountain conditions for which the Val Tournanche men are renowned. Before he was twenty he had ascended the Cervin, Dent d'Hérens, Weisshorn, Rothhorn, Gabelhorn, Dent Blanche, Lyskamm, Täschhorn, Dom, all the peaks of Monte Rosa, and many other summits. Among his employers are such distinguished names as Dr. Kugy (for many seasons), Sir F. De Filippi, A. E. Martelli, F. Gonella, Guido Rey (ascent of the Dent d'Hérens by the very difficult Mont Tabel Glacier, getting back to Breuil *the same day*, and the first ascent of the Punta Gnifetti by the E. ridge, besides many other expeditions during several years), Vaccarone, Agostino Ferrari, and others.

We find the name of our own member, Mr. Evan Mackenzie, constantly recur in his 'Livret de Guide.' Thus they did in 1891 the Colle delle Loccie, the Dent d'Hérens by the Mont Tabel; in 1892 (with Daniel) the first passage of the difficult arête from the Punta des Cors to the Dent d'Hérens, the traverse of the Cervin, and other ascents. Mr. Mackenzie, a very competent judge, calls him 'un grimpeur de toute première force.' In 1893, 1895, and 1896 they were again together, and made besides other expeditions the first ascents of the Punta Maquignaz and Punta Carrel.

He served Mr. Whymper in 1892 and 1893.

Among other names of our people in his book are: Alfred Holmes, Eric Greenwood, the two red stockings of the old days, J. J. and W. A. Brigg, W. Brunskill, W. Barrow, Howard Priestman, J. M. A. Thomson (Cervin from Breuil and back same way. 'He appeared to me a very capable man'), Victor de Cessole (traverse of Cervin), F. Baker-Gabb (traverse of Cervin), G. L. Stewart, C. V. Rawlence, E. C. Oppenheim, E. J. Mazzucchi, and N. S. Finzi.

It is unnecessary to recapitulate all their expeditions, for the *class* of them is well known. They cover the great ascents of the Western Alps.

Miss Ina Brodigan made with him in 1907 the ascent of the Dent d'Hérens by the difficult Mont Tabel Glacier.

But it was as a guide *d'outremer* that he will be best remembered.

Four pages with the signature 'Luigi di Savoia' testify to his valiant services in the expedition to Mt. St. Elias.

But I cannot forbear from quoting in full a testimony from a great mountaineer who does not suffer fools gladly.

'Antoine was my leading guide throughout a journey of seven months' duration in the Andes of S. America. We ascended Illimani

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(22,500 ft.), Sorata (24,000 ft. almost to the summit), Aconcagua (23,000 ft.). . . . Maquignaz proved himself to be an excellent guide in a country new to him, and a good traveller. He kept his temper under adversity, adapted himself to unwonted situations, lived contentedly on poor food, and was only sorry for himself when there was no work for him to do. He maintained well the good character he bears. He made many friends and no enemies amongst the people we met. As a guide he is first rate, and I have no doubt that his future will bring him fame and prosperity as one of the best guides in the Alps.'

(*Signed*) MARTIN CONWAY,
February 12, 1899.

He was one of the best men in a valley which has produced great mountaineers, and he worthily upheld the family name.

J. P. FARRAR.

THE ALPINE CLUB LIBRARY.

The following books, etc., have been added to the Library:—

Club Publications.

Appalachian Mountain Club. Bulletin, vol. xiii. Oct. 1919–Sept. 1920.
7 × 5: pp. 168.

C.A.I. Relazione dell' opera dalla Direzione del C.A.I. dal giorno della sua constituzione al giorno d'oggi. 1864
8¾ × 5½: pp. 9.

C.A.I. Sez. ligure, sottosez. "Alpi Marittime." Programma. 1921
6 × 3¾: pp. 6.

C. A. I. Milano. La Sezione di Milano e la guerra. 1920
9¼ × 6¾: pp. 173: portraits.

C.A.I. Sez. ossolana. L'Alpe ossolana. Bollettino periodico. Anno 1, N. 1–3. Giugno–Agosto 1920
13½ × 9½: pp. 16.

C.A.I. Torino. Comunicato mensile ai soci. Anno 1, N. 1. Aprile 1920
10 × 7: pp. 8.

D.u.Oe.A.-V. Wiener Lehrersektion. Physiologisches Merkblatt für Bergsteiger, v. Prof. Dr. Robert Stigler. 1920
8¼ × 6¾: pp. 4.

Foreningen til ski idrættens fremme. Aarbok for 1920. Kristiania, 1920
8½ × 5½: pp. 174: ill.

Mazama. Vol. 6, No. 1. December 1920
10 × 6¾: pp. 103: plates.
This contains:—
J. Parker, Mount Baker outing of 1920: *B. A. Thaxter*, 1920 ascent of Mt Shuksan: *R. H. Bunnage*, An ascent of Ruth Mountain: *G. M. Sholes*, Mt Baker outing in 1909: *A. J. Craven*, Mt Baker, its name and first explorer: *C. F. Easton*, Story of Mt Baker: *A. H. Bent*, First ascent of Mt Shasta: *W. E. Stone*, Alpine Club of Canada at Mt Assiniboine: *M. W. Gorman*, Flora of Hamilton Mountain: *H. S. Babb*, Swuaw Mountain trip.

The Mountaineer. Vol. 13, no. 1. Mt Anderson and Mt Olympus. 1920
10 × 6¾: pp. 97: plates.

Peñalara. Boletin mensual ilustrado. 1–6.
9 × 6½: ill. Madrid, Octobre 1913–Diciembre 1919
This contains valuable articles on climbs in Spain.

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de Montbas, H. Le peuplement des Alpes suisses. Sa répartition et ses limites d'altitude. 9¼ × 6½: pp. x, 81: maps. Fribourg, Fragnière, 1919
ex Mém. Soc. frib. d. Sc. nat. Sér. Géol. et Géogr. Vol. 8, no. 3.
The writer of this was taken prisoner at the Marne and later interned in Switzerland, and this book was composed chiefly during the years of the war. It is a most interesting paper on human geography, giving the facts as to population in the higher districts of Switzerland and suggesting the probable reasons for distribution.

S.A.C. Uto. Ratgeber für Bergsteiger. 2 Aufl. Zürich, Orell, Füssli, 1920
8 × 5¼: pp. xi, 522: ill.

Ski. British Ski Year Book. Published by the Federal Council of British Ski Clubs. Edited by Arnold Lunn and Capt. H. C. H. Marriott. Vol. 1, no. 1. Uxbridge, 1920
8¾ × 5½: pp. 186: plates.
This takes the place of the Year-Book of the Ski Club 1895–1915: Alpine Ski-Club Annual, 1908–14: Scot. Ski-Club Mag. 1909–1914: Ski-ing, 2 years: N. England Ski-Club annual Year-Book.

New Books and Articles.

Africa, South. Travel in South Africa. Published under the authority of the General Manager, South African Railways. Johannesburg, London, 1921
7¼ × 4¼: pp. xix, 316: ill.; pp. 207–234, The Drakensberg.

de Bary, Alice. Le feu dans l'Atre. Les Alpes. Lausanne, Genève, Payot. 1920
7¼ × 4½: pp. 95–129.

Beraldi, Henri. Le Passé dé Pyrénéisme. Notes d'un Bibliophile. Ramond de Carbonnières. Procès du Collier. La débâcle de Cagliostro. Paris, 1920
9 × 5½: pp. 341.
Presented by the Author.

Butler, Frank Hedges. Fifty years of travel by land, water, and air. London, Unwin, 1920. 21/-
8¾ × 5½: pp. 421.

Casamorata, Cesare. In California. In L'Universo, Istit. geogr. mil. Firenze, anno 1, num. 5–6. Sett.–Dic. 1920
9½ × 6½: pp. 321–335: plates.

Charpentier, Jarl. Some remarks on vol. 1 of Sven Hedin's Southern Tibet. In Geogr. Annaler Arg. 1, Häft. 3–4. Stockholm, 1919
10 × 7¾: pp. 369–389.

Chateaubriand. Voyage au Mont-Blanc. Nouvelle édition suivie d'une étude sur Chateaubriand et la montagne par Gabriel Faure. Grenoble, Rey, 1920. Fr. 4
7¾ × 5¾: pp. 81: portrait.

Coolidge, W. A. B. Les cinq cols de la Dent Blanche. Ex Annales Valaisannes, t. iv. ? 1920
9¾ × 6½: pp. 33–48.

Dauphiné. Syndicat d'initiative. Centres de villégiatures en Dauphiné. Grenoble, 1920
8¼ × 5¼: pp. 75.

Elliott, Claude. Lights and shadows of the Alps. In Anglo-Ital. Rev. Vol. 1, no. 1, N.S. January 1921
9 × 6: pp. 1–6.

Ferrand, Henri. Autour du Mont-Blanc. Chamouni—La Vallée d'Aoste—Le Grand et le Petit Saint-Bernard. Grenoble, Rey, 1920
12 × 10: pp. 157: plates.
This is one of the long series of finely illustrated monographs on alpine regions published in Grenoble. A good addition to the literature on Mont Blanc.

Freshfield, D. W. The life of Horace Benedict de Saussure. With the collaboration of Henry F. Montagnier. London, Arnold, 1920. 25/-
9 × 6¼: pp. xii, 479: plates.

Frey, Adolf. Stundenschläge. Letzte Gedichte. Leipzig, Haessel, 1920
7¾ × 5¼: pp. 75.

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Govi, Silvio. Il traforo del Monte Bianco ed i grandi problemi nazionali ed internazionali di traffico. Milano, Trevisini, 1920
12½ × 8½ : pp. 76 : maps, ill.

—— —— Transcaucasia. In L'Universo, Istit. geogr. mil. Firenze, anno 1, num. 5–6. Nov.–Dic. 1920
9½ × 6½ : pp. 295–320 : plates.

Gregory, J. W. The African Rift Valleys. In Geogr. Journ. Vol. 56, no. 1. July 1920
9¼ × 6 : pp. 13–47 : ill., with bibliography.

Hasler, Eugen. Hochland. Gedichte. Leipzig, Haessel, 1920
8½ × 5¾ : pp. 84.

Hedin, Sven. Early European knowledge of Tibet. In Geogr. Annaler, Arg. 1, Häft. 3 o. 4. Stockholm, 1919
10 × 7¾ : pp. 290–339.

Inaka, or Reminiscences of Rokkosan and other rocks. Collected and compiled by the Bell Goat. Vol. 13. Kobe, 1920
9 × 6½ : pp. 96 : plates.
This contains, inter alia :—
O.M.P., Tanzawa-Yama : *R. Irwin*, Ikaho : *Blue Dragon Fly*, The Komagatake of Koshu : *Ice-Axe*, From Onsen to Onsen.

Lamboglia, Carmelo. Le Alpi liguri sotto il riguardo antropogeografico. Opera edita a cura d. Sottosezione d. C.A.I. 'Alpi Marittime' di Oneglia e Porto Maurizio. Oneglia, Tip. Buona Stampa, 1920
9½ × 6¾ : pp. 68 : ill.

Lunn, Arnold. The Alpine Ski Guides. The Bernese Oberland, vol. II.
6¼ × 4 : pp. xxviii, 169. Uxbridge, King & Hutchings, 1920

de Martonne, E. Le rôle morphologique de la neige en montagne. In La Géographie, Paris, t. 34, no. 3. Sep.–Oct. 1920
10 × 6½ : pp. 254–267 : ill.

Meyer, Oskar Erich. Tat und Traum. Ein Buch alpinen Erlebens.
8¼ × 5½ : pp. 234. München, Bergverlag 1920. M. 9.60

Mincieux, C. A. Estampes anciennes sur la Suisse, no. 8. Genève, 1921
9¼ × 6¼ : pp. 48 : plates.

Neo. The neo leader's belay for rock-climbing. In the 'Individualist,' London, vol. 17. January 1921
12 × 9¾ : pp. 6–8 : ill.
Description of a new pulley for use with the rope on mountain ascents.

New Zealand. Beautiful Westland. Edinburgh, Stewart, 1920
14 × 9½ : pp. 26 : plates.

O'Connor, V. C. Scott. The charm of Kashmir.
London, etc., Longmans, 1920. 4 gns.
11¼ × 8¾ : pp. xii, 184 : col. and other plates.
A sumptuous volume with a very delightful description of the wonderful natural beauties of Kashmir.

Rey, Guido. Récits et impressions d'Alpinisme. Chambéry, Dardel, 1920
7½ × 4¾ : pp. xxx, 239.

Sacco, Frederico. Il glacialismo antico e moderno nelle alte valli di Ayas e di Gressoney. Reprint d. R. Comitato geol. d'ital. Vol. 47, fasc. 1–4.
10 × 7 : pp. 145–226 : map, plates. Roma, Cecchini, 1920

—— —— Il glacialismo nel gruppo del Monte Emilius. Reprint from Boll. d. Soc. geol. ital. Vol. 39. Roma, Cuggiani, 1920
9½ × 6¼ : pp. 111–131.

Savoy. Syndicat d'initiative d'Annecy. Centres de tourisme en Haute-Savoie. 19me édition. Annecy, Herisson, 1920
8¼ × 5¼ : pp. 50.

—— —— de la Savoie. La Savoie pittoresque. Chambéry 1920
8¼ × 5¼ : pp. 48.

Scott, Daniel. Cumberland and Westmorland. London, Methuen (1920). 6/-
6 × 3¾ : pp. xii, 227 : map, plates.
A volume of the excellent 'Little Guides' series.

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Shaw, F. H. The King's move. In Christmas Story-teller.
9½ × 6½: pp. 243–250. London, Cassell, 1920

Soler, Juan Lopez. Los Pirineos centrales. Conferencia. Publicaciones de la R. Soc. geográfica. Madrid, 1920
9 × 6: pp. 63: plates.

Spitzbergen. The Oxford University expedition to Spitzbergen 1921. Prospectus.
11½ × 9: pp. 3.

Switzerland. Swiss photo calendar 1921. Renens-Lausanne, Schneeg, 1921
8¼ × 5: plates.

Tuckett, F. F. A pioneer in the high Alps. Alpine diaries and letters 1856–1874. London, Arnold, 1920
8½ × 5½: pp. xi, 372: portraits, plates.

United States. National Parks. Rules and regulations of various National Parks. 9 pamphlets. 1920
9 × 5¾: ill.

Switzerland. Pro Helvetia. Swiss national review for travel and sport. Winter season 1920–21. (Berne, Hallweg, 1920)
12 × 9: pp. 42: plates.

Verrua, P. Il gemino tramonto di Isola del Gran Sasso.
11½ × 7⅝: pp. 12: ill. Padova, Tip. d. Seminario, 1920

Older Books.

Aflalo, F. G. Behind the Ranges. Parentheses of travel.
8½ × 6: pp. 284: plates. London, Secker, 1911

Andersen, H. C. Rambles in the romantic regions of the Hartz Mountains, Saxon Switzerland, etc. London, Bentley, 1848
8 × 4¾: pp. 312.

Coolidge, W. A. B. Johann Madutz 1800–1861. Ein Pionier der Schweizer Alpen. Eine biographische Skizze. Bern, Grunau, 1917
9 × 6½: pp. 50.

Farrer, Reginald. On the eaves of the world. London, Arnold, 1917
2 vols. 8½ × 5½: pp. xii, 311: viii, 328: map, plates.

Forrester, J. Campbell. A Four Weeks' Tramp through the Himalayas. A guide to the Pindari Glaciers. Calcutta, Thacker, 1911
6½ × 4½: pp. 49: plates.

Greg, Edward Hyde. Ascent of Mont Blanc and Monte Rosa in 1855. Printed from MS. in ALPINE JOURNAL, q.v. vol. xxxiii. no. 221. Nov. 1920
8¾ × 6½: pp. 254–259.

Haller, Albert de. Relation d'un voyage dans l'Oberland bernois (1732), publiée avec une introduction et des notes par Henri Mettrier.
8¾ × 5¼: pp. 89. Langres, Martin-Berret, 1906

Harker, George. Easter climbs (The British Alpine Club).
7¼ × 5: pp. 141. London, Manchester, Sherratt and Hughes, 1913

Hedin, Sven. Southern Tibet. Discoveries in former times compared with my own researches in 1906–1908. Stockholm, Gen. Staff Swedish Army, 1917
11 × 8¼: 3 vols. xxxii, 293: xii, 330: xii, 369: maps, plates.
Vol. 1. Lake Manasarovar and the sources of the great Indian rivers.—From the remotest antiquity to the end of the 18th century.
Vol. 2. From the end of the 18th century to 1913.
Vol. 3. Transhimalaya.
Vol. 5. Petrographie u. Geologie von Anders Hennig.
Vol. 4. Not yet published.
Also vol. of 16 maps, 15 × 16, and volume of 104 plates of Tibetan panoramas.

India. Records of the Survey of India. Vol. viii. (in two parts):
Part I. Exploration in Tibet and neighbouring regions 1865–1879. Prepared under the direction of Colonel Sir S. G. Burrard. Dehra Dun, Trig. Survey, 1915
Part II. 1879–1892. 1915
13 × 8: pp. x, 213: xii, 411: maps.

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India. Survey of India. Professional paper, No. 17. Investigations of isostazy in Himalayan and neighbouring regions by Col. Sir S. G. Burrard.
11 × 8½: pp. (iv), 36: map. Dehra Dun, 1918

Matterhorn. Report of the official enquiry into the accident on the Mont Cervin in July 1865. Printed in ALPINE JOURNAL, q.v. vol. 33, no. 221.
8¾ × 6½: pp. 234–247. November 1920

Mettrier, Henri. Le Mont-Blanc dans la géographie administrative de la France. Ex Rev. savoisienne 1911, fasc. 4. Annecy, Arby, 1912
10 × 6⅝: pp. 23.
When in 1792 Savoie became the Département du Mont-Blanc, Grégoire declared—'Dans cette chute nécessaire et prochaine de tous les rois ensevelis sous leurs trônes, le seul trône qui restera celui de la liberté, assise sur le Mont-Blanc, d'où cette souveraine du monde, faisant l'appel des nations à renaître, étendra ses mains triomphantes sur tout l'univers.' About the same time the section of Paris which bore the name of Mirabeau was given the name of 'section du Mont-Blanc' and for a time the Chaussée d'Antin was the Rue du Mont-Blanc.

—— Les mémoires de la Blottière et de Roussel. In Rev. d. Pyrénées, Toulouse, t. 16. 1904
9¼ × 6¼: pp. 15.

Perez-Cardenal, Andrés. Alpinismo Castellano. Guia y cronicas de excursiones por las Sierras de Gredos, Bejar y Francia. Salamanca, Autor, 1914
8 × 6: pp. iii, 134: plates, maps.

Palliser, Captain John. Papers relative to the exploration by Captain Palliser of that portion of British North America which lies between the northern branch of the River Saskatchewan and the frontier of the United States, and between the Red River and Rocky Mountains. Presented to both Houses of Parliament by Command of Her Majesty, June 1859.
13 × 8¼: pp. 64: maps. London, Spottiswoode, 1859

Syers, Edgar and Madge. The book of winter sports. London, Arnold, 1908
8¾ × 5½: pp. xiii, 336: plates.

Young, Bert Edward. Edward Whymper, Alpinist of the Heroic Age.
12 × 8½: pp. 9. Nashville, Tennessee, 1914

From the Library of John Ball.

Ambrosi, Fr. L'orso nel Trentino. Edizione corretta.
9½ × 6: pp. 45: plate. Trento, Scotoni e Vitti c. 1887

Ball, John. On the formation of alpine valleys and alpine lakes. In Phil. Mag., London, 4th ser. vol. 25, no. 166. February 1863
8 × 5¼: pp. 81–103.

Bonney, T. G. An ascent of the Grivola. Ex The Eagle, vol. 4, no. 19.
8½ × 5½: pp. 7. March 1864

—— From Zermatt to Zinal and back. Ex The Eagle, vol. 3, no. 14.
8¾ × 5¾: pp. 8.

Boué, A. Coup-d'œil d'ensemble sur les Carpathes, le Aarmarosh, la Transylvanie, et certaines parties de la Hongrie, d'après les journaux de voyage du feu M. Lill de Lilienbach. In Mém. Soc. géol. Paris, t. 1, mém. 12.
11 × 8½: pp. 215–316: plates. c. 1830

Catelin, E. de. Le Mont-Blanc. Deuxième ascension scientifique de M. le Dr. W. Pitschner du 30 août au 16 septembre 1861. Publiée par les soins de la Compagnie des Guides de Chamonix. Annécy, Thésio, 1861
8¼ × 5½: pp. 32.

de Charpentier, Jean. Sur l'application de l'hypothèse de M. Venetz aux phénomènes erratiques du nord. Ex Bibl. Univ. Genève. Juin 1842
8 × 5: pp. 23.

—— Sur l'hypothèse qui attribue les phénomènes erratiques des Pyrénées à une fonte subite des glaciers. Ex Bibl. Univer. Genève. Janv. 1845
8 × 6: pp. 15.

Collini, Carlo. Alcune notizie intorno all' antico ospizio e santuario di S. Maria di Campiglio. Rovereto, Sottochiesa, 1875
8¼ × 5¼: pp. 42.

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Dufour, Ch. et Forel, F. A. Recherches sur la condensation de la vapeur aqueuse de l'air au contact de la glace et sur l'évaporation. Ex Bull. Soc. vaud. d. Sc. nat. t. 10. 1870
8 × 6: 621–684: plate.

Escher de la Linth. Notice sur le Val de Bagne et la catastrophe qui en a dévasté le fond. Ex Bibl. univer. vol. 8, no. 4. Août 1818
8 × 5: pp. 24.

Favre, Alphonse. Sur l'origine des lacs alpines et des vallées. Lettre adressée à Sir Roderick I. Murchison. Ex Bibl. univer. Genève, t. 22. Avril 1865
8 × 5: pp. 16.

Forel, F. A. Essai sur les variations périodiques des glaciers. Ex Arch. d. Sc. Bibl. univer. Genève, t. 6. Juillet 1881
8 × 6: pp. 39.

Gastaldi, B. Sulla riescavazione dei bacini lacustri per opera degli antichi ghiacciai. Ex Mem. Soc. ital. Sc. nat., t. 1, no. 3. Milano, 1865
11 × 8¼: pp. 28: map.

—— Nuove osservazioni sulla origine dei bacini lacustri. Ex Atti d. Accad. d. Sc. Torino. Marzo 1866
8 × 5: pp. 8: plate.

Hacquet. Mineralogisch-botanische Lustreise, von dem Berg Terglou in Krain, zu dem Berg Glockner in Tyrol, im Jahr 1779 und 81. Zweite Auflage.
8¾ × 5¾: pp. 149: plates. Wien, Krauss, 1784

Hugi, F. J. Ueber das Wesen der Gletscher und Winterreise in das Eismeer.
8¾ × 5½: pp. 135. Stuttgart u. Tübingen, Cotta, 1842

Irving, Rev. A. On the mechanics of glaciers, more especially with relation to their supposed power of excavation. In Abstr. Proc. Geol. Soc. London, no. 427. 1882–3
8¼ × 5: pp. 12–15.

—— On the origin of valley-lakes, mainly with reference to the lake of the northern Alps. In Abstr. Proc. Geolog. Soc. London, no. 428. 1882–3
8¼ × 5: pp. 18–21.

—— On the mechanics of glaciers with especial reference to their supposed power of excavation. In Quar. Journal Geol. Soc. London.
8¼ × 5: pp. 62–71. February 1883

—— On the origin of valley-lakes with special reference to the lakes of the northern Alps. In Quart. Journal Geol. Soc. London. February 1883
8¼ × 5: pp. 74–81.

Kogh, K. R., u. **Klocke, Fr.** Ueber die Bewegung der Gletscher. II. Mittheilung. In Wiedem. Ann. 8. 1879
8¼ × 5½: pp. 18.

Lecoq, Henri. Des glaciers et des climats, ou des causes atmosphériques en géologie. Recherches sur les forces diluviennes, indépendants de la chaleur centrale, sur les phénomènes glaciaire et erratique.
8½ × 5½: pp. 566. Paris et Strasbourg, Bertrand, 1847

Liebeskind, Felix. Aus dem Ortlergebiete. n.d.
8½ × 5½: pp. 8: map, panorama.

Longman, Wm. Six weeks in north and south Tyrol. From Fraser's Mag.
8¼ × 5½: pp. 12: map. December 1872

Martins, C., et Hogard, Henri. Les glaciers. Notes et croquis. Ex Annales Soc. d'émulation d. Voyages, t. 6, 2 cahier. 1847
8 × 6: pp. 19.

Martins, Ch. De l'échauffement relatif du sol et de l'air par les rayons solaires sur une haute montagne et dans la plaine. In C.R. Acad. d. Sc., t. 59.
11 × 8½: pp. 6. 17 Octobre 1864

—— Sur l'accroissement nocturne de la température avec la hauteur dans les conches inférieures de l'atmosphere. Ex Mém. Acad. d. Sc. de Montpellier, t. 5. 1861
11 × 8½: pp. 43.

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Martins, Ch. Du froid thermométrique et de ses relations avec le froid physiologique dans les plaines et sur les montagnes. Ex. Mém. Acad. d. Sc. Montpellier, t. 4. Montpellier, Boehm, 1859
11 × 8½ : pp. 52.

Mathews, Wm. Modern geological problems. In Proc. Birmingham Phil. Soc. vol. 4, Pt. 1. 1883–4
8¼ × 5 : pp. 37.

v. Mojsisovics, Edmund. Ueber die Grenze zwischen Ost– und Westalpen. Ein kurzer Rückblick in die geologische Geschichte der Alpen. In Jahrb. d. k. k. geol. Reichanstalt. c. 1874
8¼ × 5½ : pp. 7–15.

Mortillet, Gabriel de. Carte des anciens glaciers du versant italien des Alpes. In Mem. Soc. ital. Sc. nat. Milano, vol. 3. 1860.
8 × 5¼ : pp. 40 : map.

Mortillet, G. de, et Gastaldi, Bartolommeo. Sur la Théorie de l'affouillement glaciaire. Ex Atti d. Soc. ital. di Sc. nat. Milano, vol. 5. 1863
8 × 5¼ : pp. 29 : map.

Plantamour, E. Mesures hypsométriques dans les Alpes exécutées à l'aide du baromètre. Ex Mém. Soc. phys. et d'hist. nat. Genève, t. 15.
11 × 8½ : pp. 40. Genève, Fick, 1860

Ramsay, A. C. On the erosion of valleys and lakes. A reply to Sir Roderick Murchison's anniversary address to the Geographical Society. Ex Phil. Mag. London. October 1864
8 × 5 : pp. 20.

—— Sir Charles Lyell and the glacial theory of lake-basins. Ex Phil. Mag. London. April 1865
8 × 5 : pp. 16.

Russell, Cte. Henry. Souvenirs d'un montagnard. La vente de cette ouvrage est interdite. Pau, Laheugue, 1878
7½ × 4¾ : pp. 416.

Simony, Fr. Charakterbilder aus den österreichischen Alpen. Begleitworte zu dem Physiognomischen Atlas der österr. Alpen. Gotha, Perthes, 1862
8¼ × 5¼ : pp. 32.

Sonklar, C. V. Von den Alpen. In Oester. Rev. Bd. 3. 1864
8¼ × 5½ : pp. 226–238 : 178–186 : 187–201 : map.

—— Ueber die Struktur der Gletscher. In Deutsche Vierteljahrsschrift. Hft. 3, Nr. 132. 1870
8¼ × 5 : pp. 280–337.

Sowerby, Rev. J., and **Manders, H.** Short notes of a tour in the summer of 1870 (Zurich to Gross Glockner). Marlborough, Perkins, 1871
8¼ × 5¼ : pp. 9.

Studer, B. De l'origine des lacs suisses. In Arch. d. Sc. Genève, t. 19.
8 × 5¼ : pp. 91–108. Févr. 1864

Trotter, Rev. Coutts. On some physical properties of ice and on the motion of glaciers with special reference to Canon Moseley's objections to gravitation theories. In Proc. Royal Soc. London, no. 235. 1883
8¼ × 5 : pp. 17.

Tyndall, John. On the conformation of the Alps. Ex Phil. Mag. London.
8 × 5¼ : pp. 5. Sept. 1862

Williams, Chas. J. B. Notes on Alpine summer quarters for invalids in 1869. Ex Brit. Med. Journ. London, Richards, 1859
8 × 5½ : pp. 18.

Wills, Alfred. Bad weather on the mountains, Mont-Blanc.
8½ × 5½ : pp. 11. (London, Haddon, 1857)

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VARIOUS EXPEDITIONS IN 1920.

Pennines.

BREITHORN (4171 m. = 13,685 ft.), BY N. FACE AND E. ARÊTE. Mr. E. G. Oliver, with Adolf and Alfred Aufdenblatten, August 9, 1920. Left Gandegg hut at 2.15, arrived on the Triftje arête at 4.05 after passing some of the largest crevasses I have ever seen (included a halt of half an hour).—We followed the arête, first rocks and then ice, much step-cutting; and passing a bergschrund reached the small Triftje plateau below the final peak (6.20). Left 6.50, crossed bergschrund (difficult), and fortunately finding a way through the séracs climbed straight up snow-slopes to summit ridge, struck slightly to left (E.) of summit (8.50).

Leaving at 9.00 passed three or four snow-peaks—good snow. Heavy cornices on Zermatt side. Cut steps in ice round S. side of large snow gendarme carrying heavy cornice on Zermatt side. Thence up rocks and snow to P. 4148 (10.30), whence over fairly difficult rocks, with several gendarmes, to deepest gap between the two central peaks (11.50). Left at 12.10, cut steps in ice up to and over the E. central peak (no height marked on Swiss map), descended to Col below P. 4089 (13.20), which was climbed without difficulty over a large gendarme (13.45).

As the Schwärze Glacier looked crevassed and it was getting late, we returned to the Col (13.55), instead of descending to Schwarztor, descended to the glacier, crossed the Col de Breithorn and reached Gandegg at 16.30.

The arête is an interesting expedition and offers plenty of variety. It is not very difficult, but requires care in places. Our conditions were probably favourable.

The N. face is a beautiful climb, with splendid ice scenery. It is not dangerous if taken in the early morning.

Mont Blanc Range.

MONT BLANC (4810 m. = 15,782 ft.), BY THE GLACIER DU MONT BLANC and the TRAVERSE OF THE AIGUILLE DE BIONNASSAY (4066 m. = 13,341 ft.). Mr. E. G. Oliver, with Adolf and Alfred Aufdenblatten, August 30, 1920.—We spent the previous night in the Quintino Sella hut, magnificently situated above the Glacier du Mont Blanc. Only one other party was inscribed since 1913, and the blankets were wet through.

We had intended to start at 2.30, but a strong wind was blowing and doubtful weather delayed us until 5 A.M. The way leads at first up the glacier—much step-cutting in spite of crampons. Reached the snow-saddle to the E. of P. 3873 of the Rocher du

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Mont Blanc, whence we descended into the snowy basin forming the upper plateau of the Glacier du Mont Blanc (7.15).

After several unsuccessful attempts we eventually crossed the bergschrund a good deal to the left of the ordinary route, whence we traversed back over snow-slopes to reach the well-marked arête of rocks and snow which descends from La Tournette (P. 4671), near the summit of Mont Blanc (8.45). We followed, more or less, this arête to the summit ridge at La Tournette (12.20) and the top of Mont Blanc (12.45).

Time from hut, 7 hours 45 minutes, including about 1-hour halts. We lost about an hour over the bergschrund.

This route is easy but rather tiring. The scenery is very fine.

As it was very cold we left immediately, reached the Vallot hut at 13.20 and the Col de Bionnassay at 14.45, a halt of half an hour *en route*.

The narrow E. arête of the Aiguille de Bionnassay carried some large cornices overhanging the N. side. Steps in ice had to be cut practically all the way to the top. The strong N. wind compelled us to proceed *d cheval* for a considerable distance. Top, 17.15.

After a short halt we descended the S. arête, composed at first of ice and then rocks, and going hard reached the Col de Miage at 20.00.

We were fortunate in having a full moon, but even so it was difficult to find the way through the séracs above the level part of the Glacier de Miage, and this part of the climb was about the most difficult of the day. We unroped at 22.30, and reached Courmayeur at 2 A.M. Time, 21 hours, including halts (not more than 2 hours).

The expedition is arduous, and the conditions were against us. The day was too cold for Mont Blanc. The E. arête of the Aiguille de Bionnassay was all ice and really difficult, and while Adolf is the fastest step-cutter I have ever seen, it took 2½ hours' hard work. We all had good crampons.

ALPINE NOTES.

'BALL'S ALPINE GUIDE.' THE WESTERN ALPS.—Copies of the new edition (1898) of this work can be obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. Price 13*s.* net, post free 13*s.* 4*d.* net.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART I.—A new edition (1907) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of A. V. Valentine-Richards, Fellow of Christ's College, Cambridge, can be

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obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. It includes those portions of Switzerland to the N. of the Rhône and Rhine Valleys. Price 7*s.* 6*d.* net, post free 7*s.* 10*d.* net.

'BALL'S ALPINE GUIDE,' THE CENTRAL ALPS. PART II.—A new edition (1911) of this portion of 'The Alpine Guide,' by the late John Ball, F.R.S., President of the Alpine Club, reconstructed and revised on behalf of the Alpine Club under the general editorship of the Rev. George Broke, can be obtained from all booksellers, or from Edward Stanford, Limited, 12 Long Acre, W.C. 2. It includes those Alpine portions of Switzerland, Italy, and Austria which lie S. and E. of the Rhône and Rhine, S. of the Arlberg, and W. of the Adige. Price 8*s.* 6*d.* net, post free 8*s.* 10*d.* net.

MAP OF THE VALSESIA.—Some copies of the Map issued with the ALPINE JOURNAL, No. 209, and of the plates opposite pages 108 and 128 in No. 208, are available and can be obtained from the Assistant Secretary, Alpine Club, 23 Savile Row, W. Price for the set (the Map mounted on cloth), 3*s.*

GUIDE DES ALPES VALAISANNES.—Vol. III., du Col du Théodule au Simplon, has just been published. The price of the volume (to members of the S.A.C.) is 5fr. 15c. Post free from the Quæstor of the respective section. The book is so well furnished with route-marked illustrations that a very scanty knowledge of French suffices for its use.

The volume from the Col Ferret to the Théodule is in the press.

Volume IV., du Simplon à la Furka, par Marcel Kurz, has just appeared.

THE ALPINE CLUB OBITUARY.—

	Date of Election.
Hawkshaw, J. C.	1860
Ramsay, G. G.	1876
Greene, W. A.	1880
Abney, W. de Wiveleslie	1887
Bourdillon, F. W.	1900
Turner, G. F.	1901
Whelan, F.	1902
Farrer, R. J.	1917

A LEAGUE OF MOUNTAINEERING CLUBS. In the *Climbers' Club Journal*, Mr. Geoffrey Young writes :—

'I would make a very earnest appeal to all members of British Clubs to recognise that the renascence of our Associations gives to our generation a possibly unique opportunity. Some of our Clubs have local and climbing advantages, others have civic and

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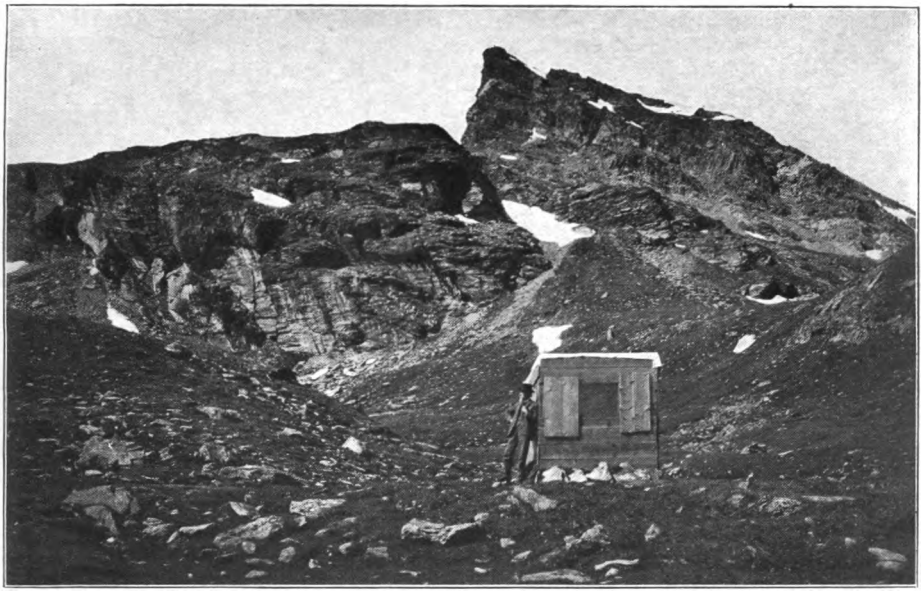


Photo H. Speyer]

THE LATE ALFRED WILLIAMS

AT HIS HUT NEAR THE HÖRNLI

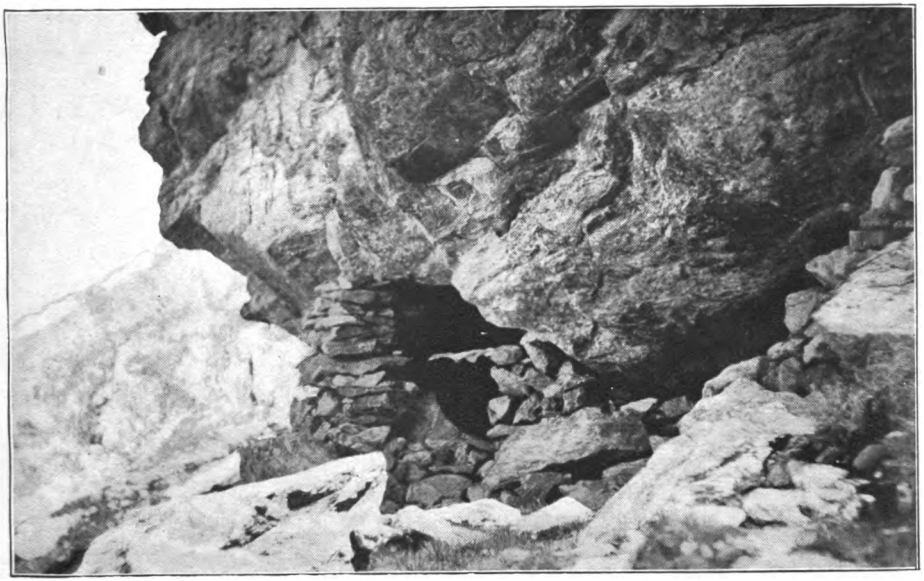
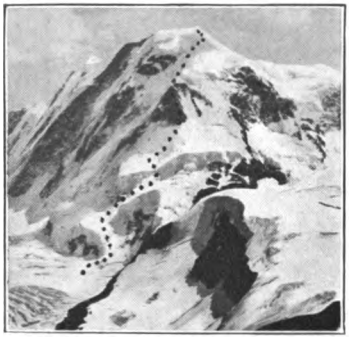


Photo H. Fox]

THE KASTENSTEIN GÎTE

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ROUTES: MEADE—BLANC



LYSKAMM

THOMSON—KLUCKER
NERUDA—KLUCKER (to left)



LLOYD—POLLINGER

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social advantages. All have a legitimate pride in their own flourishing independence. But it is our responsibility to think now not only of our exclusive amenities or of our local interests, but of the future of mountain climbing in this country as the finest, sanest tradition which we possess, and which it is our privilege to hand on to the next, very different, generation. Our organisations might, and should, combine all the advantages of fellowship, of facilities, of vigorous combined action, and of authoritative expression, which at present we either lack or enjoy apart in uneven distribution. We may well aim at making our Clubs separate meshes in a single wide net to catch all coming climbers and sweep them comfortably about, among and up our hills; and, far more, meshes in a net to draw a larger and still unconverted number within the circle of attraction of the health and delight that mountains may bring into their lives.

'We need no reminder that, below our Club designations and above our wholesome rivalries, we are all fellow-mountaineers united by a bond that gives us an almost affectionate responsibility not only for the members of any small community to which we may belong, but for all other climbers or potential climbers, however distant from us in space or time.'

The question will doubtless receive the careful consideration of the various Clubs.

Chips of the Old Block.—On September 14 Mr. Claude Macdonald made his fifth ascent of the Wetterhorn accompanied by his daughter Sheila, aged 18, and his son Hamish, aged 16.

The Kastenstein Gîte.—The present picture was taken by Mr. Harry Fox, a young cousin of our Harry Fox who was lost with W. F. Donkin in the Caucasus. It was taken from the Strahlegg side. It is situated a couple of hundred feet above the Schwarzegg hut, and was the previous regular sleeping-place.

The Old Faulberg Cave.—It would be interesting to have a photograph of this. I was never able to find it, although I found the remains of the wooden hut which succeeded it.—F.

Lyskamm, W. Summit.—Ascents of this summit were made by:

1. Mrs. Roberts-Thomson with Klucker and Zippert, July 19, 1902. 'A.J.' xxi. 266.

2. Mr. C. F. Meade with Pierre and Justin Blanc, August 21, 1908. 'A.J.' xxv. 85–86.

3. Mr. R. W. Lloyd with Joseph Pollinger and Franz Imboden, July 31, 1914. 'A.J.' xxviii. 405.

Some doubt has arisen as to the line of the three expeditions. The three pictures marked respectively by Klucker, Mr. Meade, and Pollinger show that, in the essential portions, the routes are practically identical.

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HENRI PASSET (1845–1919).—This well-known guide of Gavarnie died on December 26. He will be remembered as the guide and companion of Charles Packe, Count Henry Russell, and others, and was for many years the leading guide in the Pyrenees. He had also ascended the Meije, the Cervin, and the Dru.

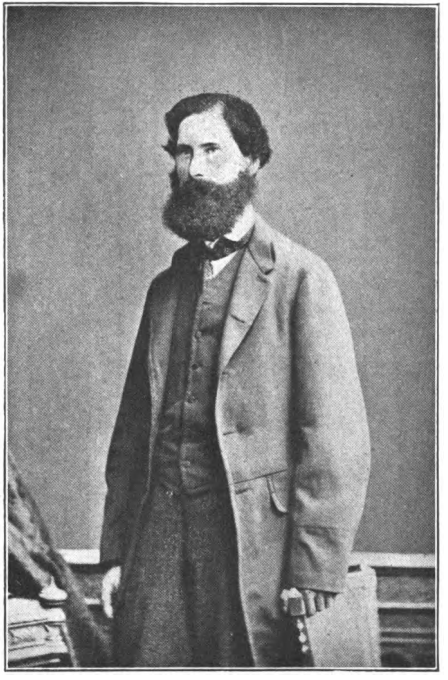
EARDLEY J. BLACKWELL.—In Mr. Coolidge's 'The Alps in Nature and History,' one finds the following :—

'Here let us commemorate briefly a bold young English climber, Eardley J. Blackwell, whose memory now survives only in a few scattered notices, but whose exploits were very remarkable for the date. In 1850 he made the first traveller's passage of the New Weissthor near Zermatt, and traversed the Col du Géant. In 1852 he crossed, in an unusually short time, the Tschingel Pass and the Strahlegg. In June 1854 he climbed the Hasli-Jungfrau (Wetterhörner) from the Rosenlaui side (being the first Englishman to reach the summit). A few days later he tried it from the Grindelwald side, though failing, owing to a violent storm, while the iron flag he planted just below the final corniche was found three months later by Mr. (later Sir Alfred) Wills. On all these climbs he was accompanied by Christian Bleuer, one of the early Grindelwald guides, who does not, however, seem to have been with him when he ascended Mont Blanc early in August 1854. Mr. Heathman, who met him in that year at Chamonix, tells us that he made the last-named ascent in two hours less than any preceding party. He thus describes him : "The fact is, there was no guide the match for him. He was six feet three, rather bony, but carrying no weight ; he had the eye of a hawk and the legs of a chamois, combined with the utmost enterprise, perseverance, and courage. He made light of the ascent of Mont Blanc. As to its difficulties, he said they by no means equalled his previous feats, though the time required was longer. He was perfectly acquainted with every nook and corner of the Alps, having walked over them, in them, and among them, forward and backward, up and down, in every direction, for three years. On parting with him for his ascent (of Mont Blanc), I wished him success, and all the pleasure which he anticipated, 'although,' said I, 'I confess I do not know what that is.' He replied he did not know either, except, being an idle man, he loved the excitement, and always felt a desire to do what others had done before him."'

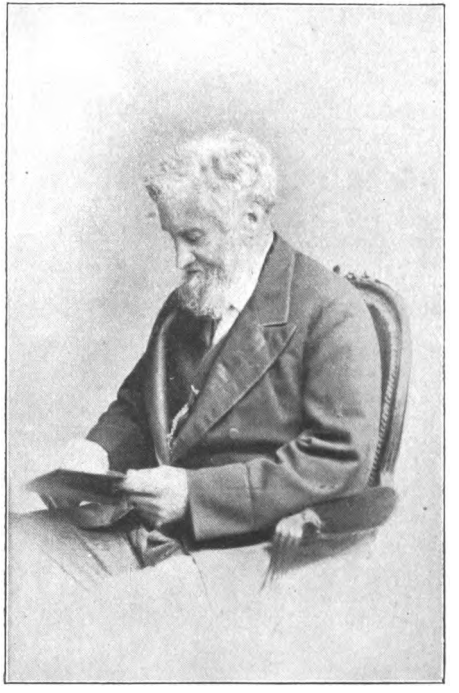
We came across him again in 'A.J.' xxxii. 53, through Mr. Montagnier's industry in unearthing the record of his passage of the Weissthor. One's keenness to know more of the doings of this determined climber was whetted further by Mr. A. F. R. Wollaston's discovery of a further reference to him, and this was supplemented by information from Mr. Slingsby ('A.J.' xxxiii. 281).

Mr. Slingsby has continued his investigations and has put me into communication with Miss Fabritius, Mr. Blackwell's grand-

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EARDLEY J. BLACKWELL



A. T. MALKIN

ALPINE PIONEER (*cf.* A.J. x and xv)

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daughter. To her I am indebted for the present portrait. Mr. Blackwell was born on May 27, 1832, at Cheltenham, and was the son of George Blackwell of Ampney Park, Gloucestershire, to which property he succeeded without, however, living there, as he had married a Norwegian girl and settled down at Vaagaa[1] in the Gudbrandsdal district, where he bought a property Klognes by the Vaagaa lake, only paying occasional visits to England. Mr. Valentine Richards informs me that Blackwell matriculated at Trinity College, Cambridge,[2] in 1850, having come from Rugby, of which Dr. Tait was headmaster, but he never graduated. Blackwell appears to have left no records of his mountain expeditions, but Miss Fabritius is good enough to refer me to Elise Aubert's 'Fra de Gamle Prestegaarde,' which gives an interesting account of the romance of his marriage, and of his neighbours.

Miss Fabritius writes: 'What might be of interest to you is perhaps his relations with the famous reindeer hunter, Go Gjende, the hero of Theodor Caspari's book "Vildren." This man came from the next valley Hedalen. He built himself a small hut by the Gjende lake (now in my possession) where he lived by himself summer and winter quite isolated from the world. He lived by his rod and his gun and kept a very strict guard against any poaching on the Vaagaa and the Hedalen hunting-grounds. My grandfather met him on his expedition to Jotunheimen, and his thorough knowledge of the Jotun Fjeld was no doubt of great help and assistance to my grandfather.'

Mr. Slingsby has found a reference in the 'Aarbok' for 1878 to the wild Leirungsdal above Lake Gjende in which is a glacier from which a steep and narrow jökel, or ice-stairs, leads up to summit of Knuthulstind, a fine peak, once considered the highest in Norway: 'it was up that jökel that Blackwell of Vaage tried vainly to climb up to the summit.'

This route was subsequently forced by Claude Wilson and R. L. Harrison with Vigdal in 1885.

Mr. Blackwell died at Vaagaa on December 13, 1866. Scanty as they are, one is very glad to have these few details of the career of a worthy forerunner of ours.—F.

Attempt on Kenia (East Africa).—Sir T. Fowell Buxton, grandson and grand-nephew of the late Sir T. F. and Mr. Edward N. Buxton respectively, and Dr. Arthur of the Scottish Mission at Tumutumu (reached from Thika Station 30 miles north of Nairobi via Fort Hall 30 miles, Tumutumu 25 miles). Left that place on August 19, 1920, with forty porters. First camp about 7000

[1] The correct spelling, so Miss Fabritius tells me.

[2] Another of Blackwell's friends (*A.J.* xxxiii. 281), Thomas Joseph Torr, born 1828, son of Thomas Torr, of Gainsborough, matriculated at Trinity in 1849.

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feet, at edge of forest (16 miles). Second camp about 8500 feet—rough path, mainly elephant track. Third camp about 10,000 feet near top edge of forest on south side of mountain, much cutting through bamboo forest. Peak in view. Fourth camp about 12,000 feet—mainly open country—deep tussocks of thick grass and giant heath. Fifth camp about 13,500 feet, 20 F., near a lake, after having ascended to 14,000 feet, allowing of near view of main peak and glacier. Sixth camp about 15,500 feet near edge of Lewis Glacier, the summit of Kenia towering straight above them on the other side of the glacier. From this camp thirty porters were sent down into the Teleki valley while the travellers with two boys, roped, went up the glacier to Pt. Lenana, 16,300 feet, returning to camp. Bad weather and indisposition only allowed of a start on August 27, when the travellers with ten boys, all roped, carrying tents, blankets, &c., crossed the glacier in about three-quarters of an hour and reached the base of the peak and tried Mackinder's route of 1899 which begins by a steep snow couloir about 200 feet high followed by a steep rock pitch covered with ice. From this point the party descended to the near edge of the glacier, whence a route by the ridge which leads from the bottom of the glacier towards the summit was reconnoitred.

Bad weather and indisposition prevented further progress. Tumutumu was regained on September 1, where the travellers were met by Lady and Miss Buxton and Mr. Rupert Buxton who had *motored* all round the mountain, coming that day from Meru, 110 miles. Their route was via Thika (Blue Post Hotel) 11 A.M., Fort Hall 2.30 P.M., Embu Boma 5 P.M. Embu Mission House, 7 miles further, was missed in the dark and the party had to sleep out about 16 miles on. Second day Chuka (Govt. Boma) 20 miles, Meru 60 miles. Third day Nyeri 96 miles (some newly settled ranches), Tumutumu 16 miles. The country motored through is described as magnificent, gorges filled with magnificent trees and tropical vegetation of all kinds. It was evidently a very adventurous journey by no means devoid of danger.

A Paper on several attempts on the mountain was read before the R.G.S. by Dr. Arthur in February.

THE LATE ERNST PÜHN, whose death was announced in the last number, had ascended 76 separate 4000 m. summits or, counting repetitions, 104. His complete list reached nearly 900 ascents, and included 209 between 3000 and 4000 m., and 104 over 4000 m.

DR. BRUNO V. WAGNER, formerly well known among the Austrian climbers, went for a solitary stroll on August 24, 1919, on the Untersberg (Salzburg). No trace of him was found until September 22 last, when practically the whole of the remains were discovered in the *Kühbachklamm*, into the head of which he appears to have

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fallen and there remained until an exceptionally heavy rainfall washed the remains out.

THE NEW ZEALAND ALPINE CLUB, of which Mr. Arthur P. Harper is President, is taking up its old activities temporarily suspended by the war, and intends to continue its Journal, of which Mr. T. A. Fletcher of Wellington has been appointed editor. The subscription for members is one guinea, and for subscribers 10*s.* 6*d.* Subscriptions can be paid to, and further information obtained from, Mr. R. S. Low, 67 Banbury Road, Oxford.

THE death is announced of M. Juge, of the Hôtel de la Meije at La Grave, aged fifty-four.

M. LE CHEVALIER VICTOR DE CESSOLE of Nice, our Honorary Member, has received the distinction of Chevalier de la Légion d'Honneur in consideration of his services during the war and of the prominent part he plays in all good works in his native town. He is Vice-President of the Bureau de Bienfaisance, to which he devotes much time. He is the moving spirit of the section des Alpes Maritimes C.A.F. in which he spares no pains to attract recruits to mountaineering from boyhood upward.

TOUR NOIR.—By using the N. ridge from the Col Supérieur du Tour Noir (3½ hours from Jardin hut), this peak can be conveniently traversed. Under decent conditions the N. ridge only requires 45 minutes up, the time in the 'Austrian Guide' being much too long.

CHAMPÉRY.—'We are having a most extraordinary winter up here. Men of seventy-five and eighty tell me they have never seen so long a period of drought. We have not had any rain worth mentioning since last October, and very little snow. The result is the spring on which Champéry counts for its power has dwindled from about 18 cubic mètres a minute to 2½. Our light is now so poor that I am unable to accomplish anything in the evening, which is a serious handicap.'

H. F. M.

Feb. 23, 1921.

23 SAVILE ROW.—Major Morrison-Bell learns that the bricks used in building our Club-house, as well as the Burlington Arcade, came from Lord Leicester's estate at Holkham. Lord Burlington helped with advice in building Holkham, and liking the bricks used had some brought up to London by water.

THE BRENVA AVALANCHE.—Mr. Evan Mackenzie has been good enough to send us a letter from Joseph Brocherel, ex-guide-chef of Courmayeur and landlord of the Hôtel du Purtud, giving

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the following details: On November 14 an avalanche of rock, snow, and ice fell from the arête leading from the Col de Peuteret to M. Blanc de Courmayeur, about 400 mètres above the Col. It fell on the Brenva Glacier, of which a part overflowed towards the Chalets de la Brenva and a part towards Purtud, where it destroyed some grass-land. But on the 19th a further avalanche of rock fell on the glacier, and set in motion all the séracs of the glacier. The formidable mass carried away completely the Purtud forest from the moraine as far as the path near the little lake. It stopped short of the hotel, nor was Mr. Mackenzie's chalet injured, but the Doire River was filled in for about 300 mètres and formed a lake, grave danger from which was prevented by the energetic action of the inhabitants in cutting an outlet.

Mr. E. G. Oliver has been kind enough to send in letters from Henri and Adolphe Rey giving similar information. Henri adds that one-third of the arête mentioned is completely destroyed, and that the granite blocks charged right down on Purtud.

L'Illustrazione of December 12 contains some fine pictures showing clearly the terrible effects of the avalanche.

HIMALAYAN NOTES.

THE members of the Everest Expedition are as follows:

Colonel C. H. Howard-Bury, late 60th—in command.
Mr. Harold Raeburn—director of mountain operations.
Dr. Kellas.
Mr. G. L. Mallory.
Captain G. I. Finch, C.B.E.
Major H. T. Morshead, D.S.O., R.E. } *Indian Army Survey*
Captain E. O. Wheeler, M.C., R.E. } *party.*
Mr. A. F. R. Wollaston, D.S.C., R.N., M.B., *Medical Officer and Naturalist.*

Dr. Kellas has spent the winter in India.

Mr. Raeburn leaves for India on March 14 to make the final preparations, in consultation with Dr. Kellas. The others follow in April. It is expected that the party will leave Darjeeling about the middle of May, proceeding *via* the Chumbe Valley to Kampa Dzong in Tibet, and thence to Dingri on the N. side of Everest.

Major Morshead was with Colonel Bailey on his adventurous journey up the Brahmaputra some years ago, and spent last summer with Dr. Kellas in the Kamet district. Captain Wheeler is the son of our Hon. Member, Mr. A. O. Wheeler, the energetic director of the Canadian A.C.

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REVIEWS.

The Life of Horace-Bénédict de Saussure. By Douglas W. Freshfield, D.C.L., with the collaboration of Henry F. Montagnier. (Edward Arnold. 1920.) Price 25*s.*

It is, as Dr. Freshfield says, surprising that de Saussure should have had so long to wait for a regular biography. For he was a very notable figure in his own day, and after; the value of his geological and meteorological observations has never lacked recognition among those who are best qualified to judge. Forbes, who entirely disagreed with de Saussure's opinions on glacier movement, and condemned his maps as worthless, says: 'There is scarcely one of the modern authors with whom I am acquainted . . . whose writings can be compared with those of the great historian of the Alps.' Sir Humphry Davy spoke of him as 'this illustrious person,' who, 'possessing from nature a penetrating genius, assisted its efforts by all the refinements and resources of science.' It is the opinion of Sir Archibald Geikie that 'the labours of de Saussure mark an epoch in the investigation of the history of the globe.'

If it be true, then, that so eminent a man of science has hardly come by his own in popular estimation, some explanation may be sought from the fact that his labours were not for the most part spectacular or calculated to appeal to the imagination of the general public. 'He contributed largely to the stock of ascertained fact,' writes Sir Archibald Geikie, 'which was so needful as a basis for theoretical speculations'; but at the same time 'he did not add much to the advancement of geological theory.' 'Il ne concluait pas assez,' said Buffon. Dr. Freshfield rightly points out that de Saussure was finally disabled by illness at the early age of fifty-four, when he might have hoped for a good many years to draw conclusions from the material which he had collected. It would be wrong, therefore, to blame him for a disproportion between material and results. Still, the fact remains: he was rather a spade-worker and a forerunner than the hero of ultimate achievements and picturesque triumphs. As in geology, so in Alpine exploration; the Mont Blanc episode is typical. De Saussure encouraged ambitions and organised success: the actual victory was won by Balmat and Paccard.

However, if there has been no adequate account of de Saussure till now, the labours of Dr. Freshfield and Mr. Montagnier amply supply the deficiency. 'I have tried,' says the former, 'to deal with de Saussure's life as a whole; to present him not only in the two capacities in which his fame is best established as a geologist and Alpine explorer, but also as a member of society, a citizen, and a philosopher'; and for this purpose a mass of manuscript material—journals and correspondence—has been collected, prin-

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cipally by the efforts of Mr. Montagnier. The result is a work in every way worthy of Dr. Freshfield's reputation; it is excellently written, fully documented, and pleasantly illustrated; and, incidentally, the desire to present the hero in a proper setting throws much light on contemporary characters such as Haller and Bonnet, and contemporary events such as the disturbances at Geneva at the end of the eighteenth century, besides presenting a very interesting picture of that curious republic and the clerical oligarchy which failed to govern it. No life of de Saussure, indeed, could be complete without a great deal of such subsidiary matter; he had so many interests and occupations—professorial and municipal work at home, travel and scientific investigation abroad. Not the least interesting part of the book is the description of his travels in France and England. But the prominent place belongs naturally to Genevese life and politics; for de Saussure was only too deeply concerned in the latter, at a time when all his good sense and moderation could not save his country or himself from misfortune.

For the rest, we have now (for the first time so fully told) the authentic story of the early attempts to reach the summit of Mt. Blanc. Dr. Freshfield's account is compiled from all the accessible documents and may, I suppose, be regarded as settling the matter once for all. He estimates the respective achievements of the four principal characters in the story—de Saussure, Balmat, Paccard, Bourrit—very justly. To the first, no doubt, belongs the credit of popularising the idea of climbing the mountain; he might be called the 'onlie begetter' of the plan. As early as 1760 he offered a reward to the first ascender. Nothing, however, happened till 1775; then, and again in 1783, Chamonix men made unsuccessful attempts; and in 1784 the enthusiastic (but sadly injudicious) Bourrit got as far—or rather his guides did—as the site of the present Vallot Observatory. De Saussure himself now entered the lists, and with Bourrit made an attempt in 1785, but was turned back by fresh snow. Then, in 1786, victory was achieved. Two Chamonix parties got as far as the foot of the arête of the Bosses; there they were turned back by apparent difficulties; but Jacques Balmat, who was with one of the parties, formed his own idea as to the conquest of the mountain, and on returning to the valley proposed his plan to a local doctor, Paccard. Three weeks later (August 8, 1786) the two stood on the top of Mt. Blanc. Scanty justice has been done to Paccard; the natural disappointment of Bourrit led him to do all he could to minimise the performance of a successful rival, and his disparagement has too long held the field. But de Saussure's notes, now for the first time published, must rehabilitate this excellent climber. To him belongs at least half the credit of victory. He was animated by pure enterprise, and no financial motive; he ascended with one guide; and he himself led during part of the ascent, in snow that alternately bore and broke. The many who have led in similar

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conditions know what that means. Paccard was a strong man and a born mountaineer; and it is time, as Dr. Freshfield says, that 'the Alpine Clubs provided for the erection, beside the monument at Chamonix to de Saussure and Balmat, of some memorial to the village doctor.' It was not till the following year that de Saussure, accompanied by no fewer than sixteen guides (he was a rich man, and did not expose himself to unnecessary hardships), himself made the ascent. The expedition is described in his 'Voyages,' and the description is now supplemented by the MS. diary which has been placed in Dr. Freshfield's hands. Other chapters in his biography record his many excursions into different Alpine regions—visits to the Oberland, to the Lepontine Alps, the tour of Mt. Blanc and Monte Rosa, a sojourn of two days on the Col du Géant. Most of these are in the 'Voyages,' and further details are added from letters and diaries. All these accounts of early Alpine travel are, of course, exceedingly interesting; but it must not be supposed that these expeditions added much to existing knowledge of routes. That was not de Saussure's intention. He was travelling to observe mountain phenomena scientifically, not primarily to undertake adventures or to make new routes. The paths which he followed in the Monte Rosa district were naturally not much frequented, but they were all known. Some were, in fact, easier than at the present day; till 1750, or so, the Théodule Pass was often a mule-track; and de Saussure and his son found it not impossible, though very difficult, to bring mules across in 1789. This was the expedition which gave him his first sight of the Matterhorn, 'that magnificent rock.' But Zermatt was inhospitable, and the Vispthal had no particular attractions for him.

It may be seen that de Saussure was not in strictness a pioneer or a leader of adventure in the Alps. But his name will always be among the foremost in Alpine literature. It is right that it should be so; for, apart entirely from his eminent services to the study of geology, he makes a very strong appeal to the average Alpinist of the nineteenth or twentieth century. He was among the first of his age to be definitely attracted and not repelled by high mountain scenery—not the mountain valley, but the glacier and the peak. Heights drew him. 'I have had,' he writes, 'from childhood the most positive passion for the pleasures of the mountains. I still remember the sensation I felt when my hands for the first time touched the rocks of the Salève.' Mont Blanc 'haunted him like a passion'; or, as he himself puts it more prosaically, 'it became for me a sort of illness.' Something, no doubt, was due to the emotional stirrings of the period—to Rousseau, and the 'return to nature,' and the discovery of beauty in rural scenery rather than in formal gardens; something, doubtless, yet probably not very much, for, as Dr. Freshfield truly points out, Rousseau's natural beauties are sub-Alpine rather than Alpine. No doubt, too, we must not forget the then growing fashion of going to see

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glaciers at Grindelwald and elsewhere—less, it is true, in a spirit of admiration than of terror. But de Saussure's emotion was something which, while not excluding Rousseauism and curiosity, was quite different from either. This desire for the mountains (as for the Absolute Good) had occasionally in the world's history found some sort of expression, but had never really taken hold on popular imagination. Perhaps it appears, here and there, in Greek literature; the Europe of the Renaissance knew it, and Gesner (1516–1565) is claimed by Dr. Freshfield as 'the spiritual father of all Alpine Clubs.' But these were sporadic outbursts, and did not last long; the prosaic mind of the early eighteenth century definitely stamped mountains as 'horrid'; and the public opinion of Geneva gave de Saussure scant encouragement. The Genevese (nothing if not highly respectable) had no use at all for *Monts Maudits*, and the savage recesses of Chamonix were regarded as being for all practical purposes as remote as Tibet. Elsewhere, certainly, there was a kind of revival. The popular mind was beginning to turn towards the mountains; it was just beginning to undergo that change which later found expression in Romantic poetry, and later still undertook the direction of the athletic activities of the nineteenth century. De Saussure gave this changed feeling copious expression. It goes with his sincere love of mountains that he writes about them reasonably, as a candid observer, without making either too little or too much of difficulties; sometimes he is really eloquent, with the eloquence of truth and not of exaggeration ('his delineations,' said Sir Humphry Davy, 'are equally vivid and correct); in this respect he is a striking contrast to his friend Bourrit, that Genevese Tartarin, whose 'Midi lui monte au cerveau' on a glacier pass, and leads him to lurid excesses of description.

De Saussure, then, is ever to be remembered as the foremost of those who rekindled and kept alive the sacred flame. 'It was mainly,' says Dr. Freshfield, 'through his practical example and his writings that the High Alps were brought within the scope of the new interest in natural scenery, that they won for themselves a place, grudgingly yielded at first, on men's lips as "Beautiful Horrors," and then came to be hailed by poets as the Palaces of Nature, and accepted by the European public as the Playground of Europe.'

From the *Journal de Genève* over the signature Edouard Chapuisat:

'. . . Il faut louer M. Douglas W. Freshfield de nous donner enfin une "Vie d'Horace-Bénédict de Saussure." Grâce à la collaboration de M. Henry Montagnier, auquel rien de ce qui concerne de Saussure n'est étranger, M. Freshfield dresse sous nos yeux le portrait vigoureux du conquérant du Mont-Blanc. Archives publiques et archives privées, tous les papiers d'autrefois furent

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fouillés par ses soins et il a su en tirer non pas un fatras de documents, mais une belle page d'histoire. . . .

'M. Freshfield, qui n'est pas seulement un écrivain de mérite, mais qui est aussi un alpiniste distingué, consacre aux essais et à l'expédition définitive des chapitres fort intéressants au point de vue scientifique. C'est là une belle page d'histoire. Le nom du physicien y paraît en pleine lumière, sans, d'ailleurs, que soient oubliés ceux qui, tel que Balmat, furent ses lieutenants habiles et courageux. . . .

'Le souvenir du grand savant méritait d'être évoqué; celui du citoyen fidèle ne doit pas échapper à notre mémoire. M. Freshfield, qui sut présenter avec tant d'autorité le caractère de notre illustre compatriote, s'est assuré notre reconnaissance. Il a marqué, une fois de plus, avec quelle sympathie les érudits du vaste empire britannique suivent le développement des idées dans cette Genève si petite, mais dont le rêve fut toujours de tenir très haut le flambeau des libres recherches.'

From the 'Gazette de Lausanne' over the signature Pierre Grellet:

'. . . L'auteur est lui-même un des pionniers de l'alpinisme, ce qui explique sans autres l'intérêt qu'il a voué au premier explorateur scientifique de nos montagnes.

'Au point de vue national, on peut certes regretter, comme le fait lui-même M. Freshfield dans sa préface, qu'il ne se soit point trouvé d'auteur suisse pour écrire l'ouvrage que vient de publier à Londres le grand éditeur Arnold, mais ce n'est pas la faute du biographe anglais de Saussure et, le livre lu, on ne peut qu'admirer la sûreté, la maîtrise et l'intelligence avec lesquelles un écrivain étranger a fait revivre son héros dans l'atmosphère d'une des époques les plus brillantes, mais les plus troublées de notre vie intellectuelle et politique.

'En ce faisant, M. Freshfield, qui est un des maîtres de la littérature descriptive anglaise contemporaine, a rendu à notre pays un hommage qui mérite notre plus sincère reconnaissance. Ancien président de la Société Royale de Géographie de Londres, président du Club Alpin anglais il y a près de 30 ans, le biographe de Saussure est un des plus anciens et des plus fervents amis de la Suisse. Il a parcouru nos Alpes à l'époque classique de l'alpinisme et leur a consacré, en 1865, son premier ouvrage. Depuis lors, il a fait paraître une série de récits d'exploration dans les montagnes du Caucase et dans l'Himalaya qui, par la haute valeur de leur observation scientifique et—rencontre particulièrement précieuse—le charme de la narration et la grâce du style l'ont placé au premier rang des écrivains de langue anglaise.

'Ces qualités se retrouvent dans son dernier ouvrage qui, à côté de son mérite intrinsèque, offre l'intérêt particulier qui s'attache pour nous au jugement d'un observateur étranger de notre histoire.

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'M. Freshfield nous apprend, dans sa préface, qu'en 1878 déjà, Ruskin, lecteur assidu des "Voyages dans les Alpes" d'H.-B. de Saussure, l'avait engagé à écrire la biographie de l'ascensionniste du Mont-Blanc, mais qu'il fut retenu par la difficulté de faire des investigations prolongées dans les papiers de famille et les archives de Suisse. Cet obstacle, l'auteur a pu le surmonter grâce à la collaboration de M. H.-F. Montagnier, un Américain érudit, bien connu dans les milieux alpinistes d'Angleterre et de Suisse et qui, résidant depuis nombre d'années dans notre pays, auquel il voue le plus vif intérêt, a assumé toute la partie documentaire de l'ouvrage. Avec un zèle et une patience inlassables, servi par les nombreuses relations qu'il possède en Suisse romande et à Berne, M. Montagnier a fouillé nos bibliothèques et nos collections particulières, recueillant une foule de matériaux inédits qui ont servi à charpenter le volume. Cette piste, suivie pendant plusieurs années avec méthode, persévérance et sagacité a été extrêmement féconde. Nous devons à ces recherches, judicieusement ordonnées et habilement mises en valeur, une biographie copieuse et large, qui n'est point seulement l'histoire d'une carrière ou le récit d'une vie, mais le tableau de toute une époque. . . .'

Since the publication of Mr. Freshfield's 'Life of de Saussure' fresh material has been discovered by one of his descendants in a cupboard in the de Saussure mansion in Geneva. This has been summarised in three pages of *Addenda and Corrigenda*, made for insertion in the volume. These Mr. Freshfield will be happy to send on application to any members of the Club who possess one of the first issues of the 'Life.'

Mountain Craft. With 28 illustrations. Edited by Geoffrey Winthrop Young. (London: Methuen.) Price 25*s.*

THIS long-postponed and eagerly awaited book has at length appeared, and high as the reader's expectations may have been he is not likely to be disappointed. All of us have realised that there have been great advances in climbing technique in the last thirty years. But this work is no mere correction of former errors nor bringing up to date of antiquated handbooks; it is the fruit of first-hand knowledge gained in an Alpine career which has ever been distinguished by originality in mountain enterprise, and we now see that originality carried into the field of technical literature. The most notable features of a wholly notable book, those parts dealing with the psychology of the mountaineer, his management of himself, his companions and his guides, are quite beyond the scope of anything of the sort which has ever before been attempted.

Having told us in his preface that it has been the practice of writers of mountaineering handbooks to squeeze grave principles

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and edifying three-line precepts out of random holiday memories and days of irresponsible adventure, Mr. Young assumes the necessary mien of solemnity and gives us the precepts and principles with uncommon skill. The reader cannot fail to enjoy playing this game with his author, even though the composure of his face may at times be in danger of breaking down should he think too much of the holidays and the adventures.

The first chapter, that on management and leadership, is in every way a happy innovation, and discreetly blends practical advice as to the care of our stomachs and club huts with suggestions on less well understood but no less important matters, such as the varying moods of a climber in adversity and success and the social composition of a party. The section on walking manners should be made a compulsory subject for every youth whose aspirations are likely to lead him beyond a road. Here the reader will gleefully wander through descriptions of the faults which he has so often had reason to deplore in his companions till he is suddenly pulled up by the ruthless exposure of some walking mannerism which he has hitherto looked upon as one of his own harmless idiosyncrasies. The necessity and importance of pace is rightly emphasised, and throughout the book there is a steady advocacy of the saving of seconds. In the higher forms of mountaineering considerations of safety and the amount of work to be fitted into the day are the overwhelming arguments, but it is none the less a mistake to suppose that in more gentle phases of our sport pace means purposeless hurry and discomfort. Rather is it the comfort of well co-ordinated continuity of movement, unbroken by needless and irritating delays and leading to the enjoyment of the longer intervals of repose which may thereby be obtained.

Of the necessary differences and the growing similarities between professional and amateur guiding, of the directions in which the amateur can hardly hope to equal the guide and those wherein the guide should, but so seldom does, strive to equal the amateur, Mr. Young has much of interest to tell us, and our interest is still further quickened when he goes on to explain to us the manner of his many successes. Our fathers before us wrote nothing on this subject. If they ever thought about it they did not take their public into their confidence. When they had occasion to describe their doings the rude elementals of a new and exciting sport sufficed to fill their thrilling story. Their readers, misled by the unstinted praise which they lavished upon their guides, were too apt to regard them as hardy automatons and give them credit for nothing but the physical endurance which enabled them to follow in the footsteps of the all-skilful natives of the Alps.

Mr. Young, on the other hand, may be accused of doing but scant justice to the professional mountaineer. He seems to imply that the good amateur climbing with the good guide should be 'in control' of the party, and 'in an important decision as to advance

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or retreat . . . is . . . in a better position to weigh the value of the party against the resistance of the mountain.' We do not know where Mr. Young draws the line which separates good amateurs from amateurs in general, but amateurs will do well to remember that there are few Youngs; and most of them will be mistaken if they suppose that they can ever assume this position when climbing with a good guide, nor should any good guide accept a decision to advance if it be opposed to his own judgment. We cannot admit that the relation of the good guide to his employers should ever be that of a professional cricketer to the amateur members of his team, and still less can we admit the startling proposition that 'every guide's nervous system has a snapping-point,' coupled as it is with the assertion that the snapping will come sooner to the guide than to the best amateurs, and the suggestion that it will be brought about by fright. The general impression given by this portion of the book is that the author has been unfortunate in the men whom he has employed. Many mountaineers will contend that they can name men whose snapping-point in many an ordeal has never shown any symptom of approach. Amongst these names might well be that of Franz Lochmatter of St. Niklaus, of whom it was once written:

'The climb must always be difficult, but bad weather and icy conditions increased its severity to such an extent that for some seven hours it was well beyond the powers of every member of the party, professional or amateur, with the single exception of Franz Lochmatter.

'There is no question that the party owe their lives to his magnificent nerve and extraordinary brilliance. It would be impossible to do justice either to the series of amazing climbing feats he accomplished or to the quiet and cheerful courage which storm, danger, and long hours of unique responsibility were alike unable to disturb.

'I have no hesitation in saying that, as far as my experience goes, he has at the present time no rival as a climber, and no superior as a resolute, refined, and charming personality.'

The occasion was probably the most dangerous climb in the lives of two men, each in his own sphere almost without a rival: the recipient of this splendid testimonial, and the giver, G. Winthrop Young.

From the general we pass to the particular, the technique of rock, of ice, and of snow. The section devoted to rock opens with a theory of the growth of rock-climbing and its share in the development of mountaineering. We read of the walking epoch, the period of easy balance, when the pioneers demanded a flat surface for the whole of the foot, and finding it more readily on snow than on rock sought out snow routes to the tops of their peaks. So we are taken through the gully epoch, the period of the grip hold and the arm pull, to the final evolution of the slab

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epoch, the period of the higher balance, where Mr. Young considers man has reached his limit of possibility in rock-climbing. The men of the gully epoch 'with its somewhat clamorous record,' they who pulled the grass tufts out of the holds which their followers have polished, indexed, and described, are dealt with in a summary manner; but it is not to be forgotten that when they defied the old Alpine tradition by climbing up the wrong sides of British hills, the very existence of which was hardly known to their less energetic contemporaries, they were founding our home school of climbing, which of late years has had so much influence on the development of the higher mountaineering.

Of rocks loose and rocks sound, holds inward and holds outward, of those parts of the body which should be allowed to use the said holds and the manner of their using, the most industrious student of the minutiæ of rock-climbing will find all that he can desire. The air is cleared for the beginner by the intimation that 'marabout rope tricks—means of evasive traction or detached æthereal flight'—are not for his mundane mind, but he is coached in all true ways of using the rope and its belays, and warned against many of the mistakes which he should cast off in his first youth. No longer can the fool who sits in his stance remain blind to his folly, nor can he who pulls himself up on the rope ever again plead ignorance as a defence.

Though much of this chapter and that on climbing in combination is of necessity written for the beginner, the experienced will also find many things worthy of their attention. Would that every man behind would take to heart the exhortation to keep the rope free for the man in front at the cost of all and every inconvenience to himself; and would that every man in front would remember that he should not go on with unslackened speed while his companion behind is negotiating a check-point—'a roguery,' Mr. Young tells us, 'ingrained in all but the best of guides.' Moreover, let no one who would be a force in a climbing party, though he be relegated to the middle of the rope, fail to read every word of that sub-section which bears the attractive side-heading 'Backing up metaphysically.' Here he may learn of the abnegation of self and the unobtrusive yet ever-watchful nursing of his leader, which are the essential attributes of a satisfactory second man. How many climbers, who have spent their lives at the obscure tail-ends of ropes, have failed to realise how shattering their inconsequent chatter may be to the nerves of a leader who is wrestling with the difficulties of a passage above their heads!

We are introduced to snow and ice in a delightful preface of three pages, where the technical expert withdraws and for an all too brief moment our old friend the hill poet is allowed to appear. We shall never again look at Great Gable from Wastdale without thinking of that venerable mountain at peace with the green fields at its feet. Nothing could be a more fitting accompaniment

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to such a preface than Mr. Spencer's superb view of rock, snow and ice, northern shadows and sunlit southern cloud.

The possibilities of rock-climbing have grown beyond all expectations in the last fifty years, but since the first crossing of the Col Dolent and the ascent of the Brenva face of Mt. Blanc, there has been no marked advance in achievement on ice and snow. The only advance of moment has been in the direction of pace rather than in the overcoming of greater difficulty, and has been brought about by the better understanding of crampons. The time is past when anyone can sanely argue against the advantages of crampons on expeditions where it is necessary to climb long ice-slopes too steep for quick progress without them, or against their necessity when the length of the day's work makes every possible means of acceleration imperative. Not everyone will share Mr. Young's optimism as to the extent to which they are destined to supersede step-cutting on the steepest ice-slopes. He himself admits that there is a limit to the angle upon which they can be used without steps, and that this limit is lower than that which has sometimes been arrived at by experiments on glacier ice, where the nature of the surface and the circumstances of the trial are entirely different. There is much to be said for the view that when a climber is reduced to step-cutting he will progress as quickly and more safely balanced on the soles of his feet, and that it is a fallacy to suppose that crampons will enable him to use smaller steps with safety. When once the habit of an easy and free balance has been attained we doubt whether any spiked device will improve a climber's stability in a well-cut ice-step, and still further do we doubt whether a beginner will ever acquire such a balance if he does not at first learn to find it on his unaided feet. Here there is an analogy in the case of rowing—an art which was revolutionised by the invention of the sliding seat. Nobody supposes that the sliding seat is anything but a necessity for fast rowing, yet nearly half a century of its use has done nothing to shake the belief that the beginner must learn the rudiments of his art, which are largely a matter of body balance, on his own unaided posterior. We take it that Mr. Young has never seen the side of a crampon split away the whole floor of a narrow step on steep and thoroughly hard ice, yet the row of four or five sharp spikes is precisely such a tool as might be devised to produce that result. Hard ice at angles above 50° is climbed far less often than many mountaineers imagine, so that data accumulate but slowly, and the extent to which crampons are going to be generally useful on ice-slopes of maximum steepness remains for the future to show.

Step-cutting having thus been side-tracked by Mr. Young, it is a relief to us when he goes on to expound that which he regards as a semi-obsolete art, for he writes of the making of steps and their use with a fullness and clarity never before reached in our language. Incidentally he explodes that firmly established fiction beloved of

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the theorists of the past, that the adept produces steps by a swing from the hips.

Of the practice of climbing two on a rope on snow-covered glaciers we find little but condemnation. Anyone who has found himself descending over a wide and complicated bergschrund with a single companion at the end of a hot afternoon, should realise that there are moments when two men climbing alone together must incur some extra danger in payment for the obvious and great advantages which they gain elsewhere. Yet serious falls into crevasses, though admittedly not so impossible as some would have us believe, are rare occurrences amongst parties whose leaders possess that mental alertness which, rather than super-excellent eyesight, is the greatest safeguard against such contingencies. There are mountaineers of no small experience, who have had the good fortune never to see a complete fall into a crevasse, and there are also cases on record where one man has succeeded in extricating his companion after such a fall. If the warning is over-emphasised, it is, at any rate, a good fault, and those who will still persist in the practice cannot say that they have not been cautioned, for their hair is made to stand on end by a harrowing picture of the consequences which may befall them. With his usual completeness Mr. Young does something towards soothing their nerves by a thoughtful synopsis of the most promising lines upon which they should attempt a rescue.

Reconnoitring, so far as the Alps are concerned, has been largely discounted by modern maps and guide-books which tell us more of the unseen than we are likely to discover by any other means. On the interpretation of things seen or half seen we are given some valuable hints, especially with regard to cornices, the probabilities of their existence and their distant appearance. As to knowing the intentions of a snow-slope by the look of its face, Mr. Young indicates what must be learnt, but holds out little hope that anyone will here be the wiser by the reading of books. Those who have the good fortune to explore more distant lands may benefit by some remarkable suggestions of the possibilities of reading the unseen by its reflection in the sky.

Ardent mountaineers will read the chapter on equipment with the interest and respect which they owe to so great an authority as Captain Farrar. They will then, if we know them aright, go back to the mountains and put into practice all their own particular theories and fancies. Mr. Young, it appears, will place himself at the head of the rebels, for he calls them to arms in a spirited counter-manifesto which he inserts in the middle of the chapter. Captain Farrar gives a summary of his work with Mr. Eckenstein in the investigation of the merits and demerits of various ropes, while we note with satisfaction Mr. Eckenstein's exposition of knots and their tying, with its much needed and lucid definition of that frequently misunderstood nautical term 'with the lay.' More than one

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author of the past has casually told his readers that they must tie their knots with the lay, yet maintained a discreet silence as to how it is to be done.

Though we have attempted the difficult task of drawing attention to some of the points where this authoritative and carefully prepared book may be open to controversy, this review has failed in its purpose if it has given an impression of any sentiment other than admiration. No mountaineer can fail to find interest and instruction in some part of this great storehouse of accumulated wisdom. Some there may be who will find it a prosaic reduction of a pleasant pastime to an exact science. If so they have been blind to a light which shines on every page for those who can see it between the dry facts and the precise theories, the sparkle of Mr. Young's belief that mountaineering, at its best an 'incomparable adventure,' is always a glorious game, and as such is worthy of our every effort to play it as well as we can.

Amongst the supplementary chapters, which are the cause of the title-page's modest description of Mr. Young as editor, that on mountaineering on ski contains much which justifies its greatest length. The reader may be indignant at Mr. Lunn's assumption that his dull brain cannot grasp the principal points of a treatise unless it be stimulated by the constant use of italics, some few excursions into capital type and occasional reiteration. He will certainly be irritated by a multitude of unnecessary references to pages which he has just read or is just about to read. Here even the compositor seems to have conspired, for once he makes Mr. Lunn refer us to a page which we are actually reading. Having suffered, we say, these natural emotions, the reader will quickly recover himself in the enjoyment of his reading. Mr. Lunn has wisely made no attempt to explain ski technique, of which he has written fully elsewhere, and devotes the greater part of his space to the peculiar problems which the mountains present at seasons when they are unknown to the majority of mountaineers. Winter mountaineering will become a safer occupation if all those who indulge in it will follow Mr. Lunn's example and devote their minds to a thorough study of snow surfaces in relation to winter conditions, and even those summer mountaineers, 'disgruntled foot-sloggers,' Mr. Lunn would call them, who never propose to burden themselves with ski will find much in this chapter which it will be worth their while to absorb.

Mr. Spencer in a short chapter sets out for his brothers of the camera some part of the knowledge which places him in their first rank. Mr. Slingsby writes of Norway and brings to his task an unrivalled knowledge of the mountains of that country tempered by the experience of a distinguished Alpine career; while other authors tell us of distant ranges about which they are well qualified to speak. An intelligent inhabitant of Corsica may some day be astonished to observe that the mountains of his island have been

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honoured with a place in this book. It is to be regretted that Mr. Elliott, who writes of the Pyrenees, has been unable in the space allotted to him to give us a résumé of his interesting and original researches upon the fauna of those mountains.

Mountaineering Art By Harold Raeburn. (Fisher Unwin. 1920.) Pp. 274. Price 16*s.*

'MOUNTAINEERING is the art of getting up and down mountains,' so begins Mr. Raeburn's book—and assuredly what he has to tell us deserves our respectful attention, for his experience in all branches of mountaineering is very extensive, and he is one of the most accomplished of modern mountaineers.

The book, though not bulky, is rather heavy in the hand. It is not a book for the pocket, and though a centrist might pack it, the wanderer will not. Printed on thinner and lighter paper it would have been a welcome *compagnon de voyage*. Sections are devoted to Equipment, to British and Alpine Mountaineering, to 'Ethics and Rules,' and to Exploration. There is a short section addressed to Lady Climbers, a good index, and a short glossary of somewhat singular selection. Possibly this has reference only to words used in the work—we have not tested it; but a really complete glossary of Alpine and climbing terminology would have been a welcome addition to the book, as the best pre-existing is admittedly imperfect.

Mr. Raeburn very gracefully acknowledges his indebtedness to previous works of a somewhat similar nature, such as the excellent little 2*s.* book, 'Mountaineering,' by Claude Wilson, and he frequently quotes from these, and from the older Alpine classics, sometimes indicating his agreement and sometimes his disagreement with the views and statements of some thirty or more years ago. But on the whole the canons of mountaineering as laid out of old appear still to hold good to a very large extent. Yet matters have advanced, and, for one thing, modern mountaineering without the assistance of professional guides may be said to have made good. Credit is given to some of the pioneers of this movement, but nothing is said of the exploits of the Zsigmondys and Purtscheller in the early 'eighties, and the author is very reticent as to his own achievements, which are not surpassed by those of any other modern party.

Mr. Raeburn's enthusiasm for guideless climbing indeed carries him a long way; he even goes so far as to say that every beginner should look forward to being his own guide some day. But a word of caution is needed, for grave risks have been run, and lives lost too, by amateurs who, failing to realise their limitations, have undertaken expeditions beyond their powers. In our opinion guideless mountaineering, based on an insufficient period of initiation, is becoming perhaps too common. On the

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other hand, to call a party 'guideless' because it does not include a professional is, as Mr. Raeburn points out (p. 9), a misnomer, for it may contain one or more members of many years experience, often pupils of great guides, and of a capacity quite equal to any of the regulation great ascents. It must not be forgotten, however, that modern facilities, such as maps and books, scratches and tracks, have much reduced the demands on the mental capacity of the modern 'guideless' leader.

While on this subject, we cannot omit comment on Mr. Raeburn's extraordinary statement that 'most' of certain named climbers 'were, both as mountaineers and climbers, not merely the equals, but much the superiors of the best Swiss guides.' He will make the survivors blush, and make us remember that his personal experience of the powers of the best guides is extremely small, while his knowledge of their record in distant ranges appears to be defective. In our opinion, and it is widely shared by leaders of amateur parties who have learned their craft under great guides—surely the best school—there never has been an amateur who, taking into account all the attributes that go to make the great mountaineer, has been the equal of the best professionals of the day.

Mr. Raeburn, though looking on four as the ideal number, is a vigorous advocate of the party of two, and he even excuses his own weakness for solitary climbing. He may be a law unto himself, but climbing alone is not sound, and a party of two must be both good men, while even so a third—almost any third—adds a desirable element of safety on a snow-covered glacier. Indeed, the party of three remains for us the ideal.

Among the novel features of the book are the three 'imaginary,' or more truly 'synthetic,' climbs: A British Rock Climb—A British Snow Climb—and An Alpine Expedition—all of them of rather more than average difficulty, and so arranged as to bring as many and as varied experiences and situations as possible into the day's work. The climbers are labelled A, B, C, which makes their doings tedious to follow, and continual repetition of the capitals lends to the pages a somewhat Euclidian aspect, while the narrative seldom reaches the level which the record of an actual day's work inspires. But they are illuminating chapters—original in conception—and should convey to the uninitiated an idea of the varied pleasures, discomforts, and sensations which mountain-climbing in its various phases has to offer.

Any attempt to review or criticise the details with which this book is packed would probably test the patience of the reader beyond reasonable endurance. Some will not agree with Mr. Raeburn's strong advocacy of small boots; and most men have fads of their own as to some details of equipment. But his advice is very generally sound and reliable, and the bubble of the snow-eating 'danger' needed pricking. At the same time, snow may upset some stomachs. It seems curious, though, that with his aluminium

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cooker and his flask of methylated spirit, he should apparently not have discovered the secret of a really good long 'drink' made from melted snow, lemon essence, and sugar (or saccharine), to be drunk nicely iced, or boiling hot, according to the moment.

We can thoroughly endorse what is said as to the merits of 'Pommade Sèchehaye' as a protection to the skin. Mr. Raeburn omits the maker's address: E. Hausser, 10 Place du Bourg de Four, Geneva.

Mr. Raeburn expresses his thanks to the contributors of the plates. It seems ungracious to say that only about half of these strike us as satisfactory illustrations. The line drawings of implements, ropes, are useful. Some of the photographs of climbers at work are good enough, but surely one could almost waltz on the gentle snow-slope (p. 80) where such cautious methods are depicted. Again (p. 183), is it a 'chimney'? It looks like a 'face'; and the 'Vertical Pose' (p. 189) looks very far from vertical. The 'Gritstone Table' (p. 54) is a delightful picture. Somehow it recalls the Caterpillar in the 'Alice Book.'

Despite the advances of modern photography, the best pictures of climbers at work have been 'drawings,' and possibly Whymper and Willink and Compton will never be equalled again.

Mr. Raeburn's book is one which all ardent mountaineers will buy. The style is terse and direct, and he never leaves one in any doubt as to his meaning. We heartily congratulate him, and though it can add nothing to his reputation as a mountaineer, which is already secure, it leaves the Alpine fraternity in his debt. Yet Mr. Raeburn might do more. Instead of his 'Imaginary Climbs' let us have a book of real live reminiscence.

Den Norske Turist-Forening's Aarbok, 1920.

THE long-delayed issue of this Year Book is a proof that our Norse friends have met with publishing difficulties similar to those encountered in England. However, the reputation of its predecessors is well sustained in the present issue. The record of new mountain ascents is, for reasons which are obvious, smaller than usual. Still, what there is may certainly be termed good.

The erection, some years ago, of the cosy mountain hut at Krossboden, near the huge Smörstabsbræ (the Butter Tubs glacier), may be said to have created a new and a much-needed mountaineering centre, the need of which those of us who were actively engaged in the sport of mountaineering in 'Jotunheim' during the 'seventies in last century were well aware.

As the excellent and witty paper of Nordahl-Olsen, which first appeared in the Aarbok for 1912 of the city and province of Bergen, and which now enriches the pages of the N.T.F.'s Aarbok, clearly shows, the ascents of the various weird peaks, the Smörstabstinder, can now be readily made from a fairly good mountain hut. Not

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only this, but glacier passes can be made over to the Leirdal and Gravdal. Ascents have also been made of Galdhöpiggen and the monarch's guardian satellites from this centre.

Certainly the Smörstabstinder and glacier afford excellent sport. Three distinct peaks, Saska, Gjeita, and Kniven, are really good rock peaks. I have only climbed Loftet, the highest of the group, and that an outlier—one, too, which had previously been ascended by ordnance surveyors.

The leading features in this year's Aarbok are the expeditions made by the clubs of Boy Scouts, established after the English model in 1909.

The most notable of these consisted of a leader and twenty well-trained lads, with several years' practice and a 'right grip of things.' This, indeed, was needed, on their journey, though it began easily by rail from Christiania to Throndhjem. From the latter city the party went by steamboat up to and round the N. Cape and thence to the head of the huge Porsanger Fjord—a good 1200 miles so far, and an easy trip.

There are other good papers in the Aarbok, and, as is always the case with this annual, there are excellent photographs, especially, perhaps, that of Rembisdalsvand.

An 'In Memoriam' notice and an excellent portrait of Bank-direktör Jens Andersen Aars will interest many of our A.C. members, as it was he who represented the 'Norske Turist Forening' at the Jubilee meeting of the Alpine Club, when he made an excellent and a very appreciative speech to us at the A.C. General Meeting.

The report of the Annual General Meeting of the N.T.F. will interest many of us who knew well the noble Skjæggedalsfos, which, sad to relate, has been entirely ruined by the greed of men who have transformed Tyssedal and Odde into a jumble of workshops. So far as I can see, the true Norsk mountaineers strongly condemned this desecration.

WM. CECIL SLINGSBY.

The British Ski Year-Book. No. 1, 1920. Price 3*s.* 6*d.*

THE first issue of the British Ski Year-Book is full of promise for the future. One cannot fail to realise that the high standard reached is, in great measure, the result of boundless enthusiasm and sincere love for the mountains on the part of the editors, and in particular, Arnold Lunn. His 'Ski Tour in May' is the writing of a man who climbs and skis in the Alps, not for the sake of 'doing' them, but because they are friends in whose society he revels. Even though one may be of the fraternity of that unsurpassed of all ski-mountaineers, Marcel Kurz, in regarding skis merely as a means of 'getting there,' and experience no pleasure in climbing up a slope just for the fun of ski-ing down it, yet when one catches a glimpse of something of the sheer delight which is Arnold Lunn's as he

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rushes down a mile-long snow-covered slope, one may be wrong after all.

One of the features of the book is Maxwell Finch's 'A Winter's Night on the Tödi,' a well-told narrative, from which the mountaineering ski-er will be able to gather many a useful hint. The imperturbable Max is here seen at his very best, whether rescuing himself from a crevasse or sitting out the whole of a winter night, *toujours le même*.

One looks forward to the next number of the Year Book, full of confidence that the high level reached by the first issue will be maintained. A work prompted by enthusiasm and love for one's subject can never be dull or laboured.

The Climbers' Club Journal, 1920. Hazell, 52 Long Acre. 5*s*.

Mr. Mallory must be congratulated on this volume, the first under his editorship. It is very well turned out in every way. Not the least amusing are the verses on 'Climbing Companions,' by R. Bicknell, in which he takes off, very gently, our climbing peculiarities; and Herbert Reade's on 'The Complete Climber.' Rudyard Kipling must look to his laurels! Two lines seem singularly applicable to the author himself:

> 'You will talk with manner easy of a traverse rather breezy, an uncompromising slab,
> Where you often love to linger, though no hold for foot or finger, crawling sideways, like a crab.'

Geoffrey Young's 'The Nesthorn' describes a season of guideless climbing in 1909 with Donald Robertson and George Mallory. The incident, vividly described on page 19, will give the most self-contained climber sufficient sensation.

Other articles are 'A Night in the New Forest,' by David Pye; 'Rum,' by Conor O'Brien; and 'Home Climbs,' by W. P. Haskett-Smith. W. W. McLean's 'First Impressions of the Alps' brings back to us all happy memories; George Finch describes a traverse of the two Dru made by himself and his brother Max with a rather careless German climber. It speaks much for the capacity of the brothers that their companion did not come to serious grief.

Notes on the season of 1919 are contributed by J. L. G. Hadley, and on 'Snowdonian Place-Names' by E. W. Steeple; while G. S. Bower, one of the most indefatigable and able of the young generation, tells us his experiences in the Highlands.

Guide des Alpes Valaisannes. Vol. iv. Du Col du Simplon au Col de la Furka. Par Marcel Kurz. Payot & Co. Lausanne.

This volume may be said to be a new and much extended edition of the 'Climbers' Guide to the Lepontine Alps,' published in 1892, and one is much indebted to the very able young mountaineer who has taken on himself the labour of revision.

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We are almost sorry that it could not have been arranged for him to put all this work into a guide to a district containing at least a few summits of any magnitude, and a few *courses* which could be called difficult, so that we could have availed ourselves of it more frequently.

His descriptions of routes are admirably clear. A mountaineering leader himself, he knows exactly what kind of information the climber wants, so that he who runs may read.

The seventy-five sketches from his own pen are the best of their kind. Speaking personally, we lay great stress on the rough outlines of routes as a means of advancing one's mountaineering education. It is often quite enough, and more interesting, to have in one's mind's eye the general line, and work out the details on the ground itself.

We must not, at the same time, be held to 'crab' this or any similar book which, on the precedent of Mr. Coolidge's volumes, contain much interesting historical and topographical information besides route-descriptions.

The book is well printed but is needlessly heavy, as was also Mr. Louis Kurz's admirable Mont Blanc Guide.

The Austrian Mont Blanc Guide was a model in respect of lightness.

The Alpine Ski Guides: The Bernese Oberland, vol. ii. By Arnold Lunn. King & Hutchings, Ltd. Uxbridge, 1920.

THE first part of these useful guides was published some years ago, and covered Villars, Adelboden, Saanenmoser, and Zweisimmen. The present volume covers the country between Gemmi and Grimsel, *i.e.* the central massif of the Oberland.

Mr. Lunn has every qualification as author, for he has done nearly all the chronicled expeditions, many indeed several times during ten winters and twenty summers spent in the massif.

He will not be offended by having any errors or omissions pointed out to him, and with this in view he has printed a very limited edition.

The book must be used in conjunction with the Ski-map prepared by Mr. Lunn and Herr Othmar Gurtner, the author of the valuable monograph on the Gspaltenhorn group in the 'Jahrbuch S.A.C.,' vol. liii. Mr. Lunn is an ardent apostle of spring skiing, not content merely with winter.

The book is a thoroughly practical one The author is very careful to warn the traveller of the danger of avalanches, *e.g.* the approach to the Gauli hut, route 215. Too much stress cannot be laid on this point, for the main charge against ski, from a purely mountaineering point of view, is that they enable and encourage people, innocent of the rudiments even of mountaineering, to undertake expeditions which, far too often, have the most dire results. Whatever the dangers of summer mountaineering, they are much

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added to by winter conditions, and greater, not less, experience is demanded to ensure safety. The summer mountaineer will note with some amusement that contumely is poured on some of his great landmarks, such as the Weisshorn.

Every mountaineer—for Mr. Lunn's splendid enthusiasm cannot fail to be a serious pitfall even to the most rigid of summer devotees—owes Mr. Lunn a debt of gratitude for the great labour the preparation of such a book involves. We hope that Mr. Lunn will allow us to suggest that he read his proofs a little more carefully; thus on page 85 there are seven misspelt words, while his conversion of the côte 1920 does not agree with his useful tables—so the R.G.S. is in good company!

CORRESPONDENCE.

Old Memories.

J. E. C. Eaton, Esq.,
Hon. Secretary Alpine Club.

Dear Sir,—Your favour of the 22nd ult. reached me at the address below, and I would have answered promptly but was disabled by illness, from which I did not expect to recover. However, I am now much better, and, if I pull through the winter, may last a while longer. In any case, shall probably remain at this address for the rest of my life.

My climbing days, for recreation, were ended, of course, long ago, but I spent many years in South America, doing missionary duty there, and several times I had the privilege—it was real happiness—of crossing the Cordilleras, and my mind then went back to those days of early romance, when, in company with honoured and ever-remembered friends of the dear old Alpine Club, I revelled among the Peaks and Passes of Switzerland. Especially have I always held in loyal remembrance one with whose kind friendship I was favoured, Sir Leslie Stephen, who was then plain Leslie Stephen, of Trinity Hall, Cambridge. He staggered me once by saying (I didn't believe him) that I was the 'best walker' he had ever seen.

I have now entered my eighty-first year, having returned to my old haunts in the North only a year ago.

Thanking you, dear Sir, for having taken the pains to hunt me up, and for your courtesy in writing to me,

I remain,
Most sincerely yours,
James Kent Stone
(Father Fidelis).

Passionist Retreat,
Norwood Park, Chicago,
Illinois, U.S.A.,
December 22, 1920.

[Father Fidelis's portrait appeared in 'A.J.' xxxii., opp. p. 226.]

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The New Zealand A.C.

Dear Captain Farrar,—The 'A.J.' from time to time brings home to one how many stalwarts of the A.C. have 'gone west' during the last few years. I refer specially to Dent, Charles Pilkington, Wicks, Woolley, and A. G. Topham, and, though not a member, to dear old Miss Walker. These and others who are still with us did a great deal to help us in the early days of Alpine climbing in New Zealand, and as their influence on the ideals of the N.Z.A.C. was very great, it may not be out of place to recall the days of thirty years ago.

In 1891 Mannering and I called the first meeting to form the N.Z.A.C., and we were especially anxious to start and keep the Club on strictly A.C. lines, and generally build it up on the same high ideals and standard of qualification.

Mannering and I had just been elected members of the A.C. when I went to London in 1892, and I hoped to be able to meet some of the leading A.C. men during my short visit; but the kindness and consideration of those named above, together with Horace Walker, then President, F. F. Tuckett, D. W. Freshfield, Cecil Slingsby, C. E. Mathews, and many others, exceeded my wildest hopes.

To begin with, Miss Walker took me in hand at Zermatt and made a point of introducing me to the leading members there, and she and Horace Walker invited me to join their annual Alpine house party at Liverpool, where I first met Woolley. From there we went on to stay with Charles Pilkington for a few days, and, if I remember rightly, some of us went afterwards for a day or two to C. E. Mathews. In London Dent and Freshfield invited me to the Alpine Dining Club, and there I first met Cecil Slingsby and others who have since taken so kindly an interest in our work in New Zealand.

This may seem to you rather a small matter, but imagine what it meant to Alpine climbing in New Zealand and to our Club! I was only a youngster, and secretary of the youngest Alpine Club, and it speaks volumes for the kindness and zeal of these men (my seniors by many years) that they all went out of their way to encourage and help us, by their flattering interest in our work, both then and since by much correspondence.

Remember that in those days there were only about half a dozen pioneer Alpine men here—Mannering, Dixon (now too 'gone west'), Malcolm Ross, myself, and one or two others. We were attacking without expert knowledge or assistance an unexplored mountain system as great as Switzerland, and under much more difficult conditions. When you remember this, you will realise what encouragement it was to us to find ourselves taken into the heart of things by such men as I have mentioned, for I always recognise

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that the kindness shown to me was as the representative of that small pioneer band out here.

Curiously enough, many of the men I knew best at home in the A.C. were much senior to me, for beyond one or two seasons in Switzerland I did very little climbing in Europe, and therefore I feel a special sadness when I realise, every time I open a new JOURNAL, how many are leaving us.

As this aspect of their zeal in the great cause of Alpine exploration has not been touched upon in the JOURNAL, you may perhaps think it worth while to publish some of the above as an acknowledgment from the N.Z.A.C., through its President, of the great debt our Club owes to these men for the inspiration and kindly advice given at a critical period in our history. It has formed a link between the two Clubs which we hope to maintain.

The N.Z.A.C. is again becoming an active organisation and still has those high ideals steadily before it.

Yours truly,
ARTHUR P. HARPER.

Wellington Club,
New Zealand,
January 10, 1921.

THE EARLY USE OF CRAMPONS.

To the Editor of the ALPINE JOURNAL.

SIR,—I have recently read, either in your paper, or in Mr. Winthrop Young's book, a reference to the antiquity of crampons. I think they were spoken of as having been employed at least 300 years ago. In fact, their use is much more ancient. I have not had time to make any special investigation of the matter, but the following instances of early examples have come in my way.

The earliest, dating from the first Iron Age, comes from Hallstatt, and may be referred to about 500 B.C. This example is, I believe, in the museum at Vienna. Other examples of not much later date were found at Karlstein, near Reichenhall, and at Ottmanach in Carinthia.

Crampons were also used by the Gauls in Roman days, and several which were found at Mont Beuvray (Bibracte) are to be seen in the Musée Saint-Germain-en-Laye.

As Hallstatt was a very early Celtic centre, and the other examples come likewise from the Celtic area, crampons were probably a Celtic invention and carried to Gaul by Celtic immigrants.

MARTIN CONWAY.

Imperial War Museum,
January 1921.

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ALPINE CLUB PHOTOGRAPHIC EXHIBITION.

After an unwelcome interval of four years the annual Photographic Exhibition has again resumed its place as the most notable function of its particular kind in the Alpine world of London. In spite of the obvious difficulty of obtaining exhibits so soon after the War, it has this year attained a standard of combined excellence and variety seldom before surpassed, although the pictures numbered only about 150 all told.

While many were of value mainly for topographical reasons, there was an unusually large proportion of works of the highest order of artistic achievement. This was particularly true of those whose chief attraction lay in a sympathetic and skilful rendering of cloud effects. Moreover, in spite of the comparatively small number of separate photographs on view, the ground covered was very varied and extensive.

Had Alphonse Daudet been with us still, in spite of all his love of poking fun at the traditional Alpine English tourist of his day, he would certainly have felt impelled to extend considerably the scope of the compliment he paid in 'Tartarin sur les Alpes' to the ubiquitous enterprise of the British mountaineering brotherhood—'du fameux Alpine Club de Londres qui a porté jusqu'aux Indes la renommée de ses grimpeurs.'

Now, indeed, the very mention of that particular region tempts us to speculate on the revelations we may expect the next exhibition to unfold of that mysterious mountain world whose secrets are at last on the eve of disclosure. Shall we be privileged to look upon glorious panoramas such as Signor Vittorio Sella has reproduced, or that masterpiece of Professor Garwood's, whose 'Siniolchum,' with its vast curtain of dazzling slopes of snow and hanging glacier, is surely one of the noblest pictures of a single ice-clad peak ever made? Such an achievement alone would give the lie to the scoffer who depreciated his craft as a 'foe to graphic art'!

The exhibition may well claim as a whole to have offered a liberal education in physical geography, and we almost wonder that there has been no request to afford special facilities for visits on the part of enterprising teachers of that fascinating branch of useful knowledge.

With the exception of a charming view in Grindelwald by Mr. de Quincey, winter photography was not represented, a distinct deprivation when one recalls the exquisite work at that season by the late Clinton Dent and Hermann Woolley, and Mr. Sydney Spencer.

We were sorry to miss several familiar names from the catalogue, but were glad to welcome some fresh recruits within the walls.

Mrs. W. E. Durham showed a predilection for animate nature,

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Photo R. S. Morrish]

AIG. DE BIONNASSAY

FROM TÊTE ROUSSE

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Photo W. T. Lister]

THE MISCHABEL (E. FACE)

FROM THE BORTELHORN



Photo G. Hasler]

SUMMIT OF GRINDELWALD DRU

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particularly in some climbing incidents, in an effective 'Procession in Zermatt,' and in 'Cows on an Alp,' while Miss Sophie Tiarks' best things were a pleasing view in the Saastal and a striking study of 'A Crucifix near Saas Fee.' Mrs. Clive Smith showed a pretty little picture, 'The Almagellhorn from below Saas Fee.' Of Miss Drew's varied exhibits we were most pleased with the views in the Blümlisalp group, especially that from the Gamchilücke towards the Lauterbrunnen Breithorn, and we were glad to have Mrs. Geoffrey Howard's charming views of familiar Arolla peaks, and a cloud-wreathed Matterhorn displaying considerable artistic feeling.

Mrs. Walter Weston showed a photograph of the broad broken ice-fall of the Grindelwald Fiescher Glacier from an unusual point of view, just below the Mittellegi arête, while to Miss Margaret King we are indebted for one of the most beautiful pictures in the exhibition, 'Mont Blanc and the Arve.' The combined effect of distance and dignity in this deserves the highest praise.

Mr. Hugh Gardner's 'Rosengarten,' the result of just the right exposure, afforded the delightful contrast of a foreground of dark trees with a faint, almost phantom, line of distant peaks. A fine pair of enlargements was shown by Mr. R. Graham, 'The Taeschhorn and Dom from the Südlenzspitz' and 'The Nadelhorn from the Südlenz arête.'

Mr. Howard Priestman's study of the Black and Red Coolins from Portree, with its combination of land and water, conveyed a wonderful sense of repose.

Mr. Morrish's striking exhibits, from the point of view of artistic effect, impressed us as the most remarkable contribution on the walls. The cloud effects in three of them were of great beauty: one in particular, a noble prospect of the Aiguille de Bionnassay from the hut on the Tête Rousse, taken shortly before sunset, fully accorded with the title attached to it in the catalogue, and the effect of the dying sunlight shining on the vapour in the middle distance lent additional dignity to the towering snow-crests high above. This picture well deserves reproduction in the JOURNAL.

Other works notable for the excellence of their cloud effects were Mr. de Quincey's 'Storm on the Jungfrau'; Dr. Williamson's view of the Matterhorn (presenting a fine background to the intervening beautiful veil of vapour), and his early morning prospect of storm-clouds from the Mischabeljoch; the 'Cloud and Mountain from the Titlis,' by Mr. Arthur Gardner (whose Zinal Rothhorn also, though not in this category, is a fine example of the dazzling effect of new snow in a clear light); and a very beautiful view in the Val di Corteno by Sir Alexander Kennedy, where a rift in a near cloud-curtain lends additional height and distance to the peaks beyond. This last, with his view in the Val di Brenta, we thought Sir Alexander's happiest effort.

Mr. de Quincey's large pictures from Lo Besso of the Rothhorn and Weisshorn showed distinct technical excellence and were full of fine detail, but were perhaps somewhat lacking in atmosphere.

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Of Mr. Stevens' exhibits we were especially struck with the pretty view of Mont Pourri, and the delightful pastoral landscape with the Saas peaks beyond the Triftalp.

Mr. Francis Ellis sent six excellent pictures, of which the most noteworthy were from that favourite 'bellevue' the Wellenkuppe, of the Obergabelhorn, and of the Matterhorn with telling contrasts of foreground with a distant peak.

Canon Dawson showed much artistic sense in his beautiful study, from the Findelen path, of the Matterhorn vignetted in graceful firs, and in the characteristic valley scene at Cogne, but, above all, in the delightful afternoon view of the Mischabel from the Almagellalp, where the effect of the delicate film of clouds on the tall peaks was enhanced by the foreground of firs above which they rose.

Of Mr. Hasler's contributions there stood out, as one of the gems of the whole exhibition, 'A Tower on the Grindelwald Dru.' This lovely picture illustrated to perfection the effect of the dazzling sunlight of a late May morning on the half-transparent edge of snow just ready to melt.

Sir William Lister's noble prospect of the Mischabel group from the Bortelhorn was another worthy illustration of mountain majesty, and his 'Aiguille de Lépéna from the Glière' displayed fine contrasts between a striking foreground and the distant peak. The first-named was chosen for reproduction in the JOURNAL.

Mr. Gover's 'Obergabelhorn,' with its effective shadows and broken lights, deserves notice, and even more so his fine view of the Grand Cornier from the Pigne de L'Allée. Dr. Thurstan Holland was worthily represented by a beautiful scene on the Col du Géant, and a view of the Matterhorn and the Lac Bleu. That favourite subject of the Arolla photographer, Mont Collon, was charmingly rendered by the Rev. F. C. Bainbridge-Bell, while interesting and varied scenes came from Mr. Wynnard Hooper and Mr. Finzi.

Mountain gymnastics were adequately illustrated by Mr. G. D. R. Tucker on 'Tryfaen,' and by Mr. Alan Greaves on the 'Fröneli, Isenfluh'; the latter also caught from near the Rottalsattel some magnificent cloud effects towards the Gletscherhorn.

Of familiar scenes in Skye, we had a pleasing prospect of 'Sgurr Alastair' by Mr. G. S. Bower, and a fine landscape, full of light, by Mr. Hugh Gardner.

Mr. R. W. Lloyd showed two views of considerable interest and topographical value—the French side of the Col de Bionnassay, and the Oberschalligrat from the Weisshorn gîte, illustrating two fine new expeditions made by him in 1919 and 1920 respectively.

The landscape near Oberstdorf, Bavaria, by Mr. Benson Lawford, was full of repose. An excellent series of postcard views by J. Gaberell of Zurich was shown by Mr. F. W. Bourdillon, of whose death we now regret to hear.

The Rev. Walter Weston can always be relied on for good work, and his contributions included a very artistic little picture, 'The Jungfrau from the Obersteinberg,' with the snow-peaks peeping

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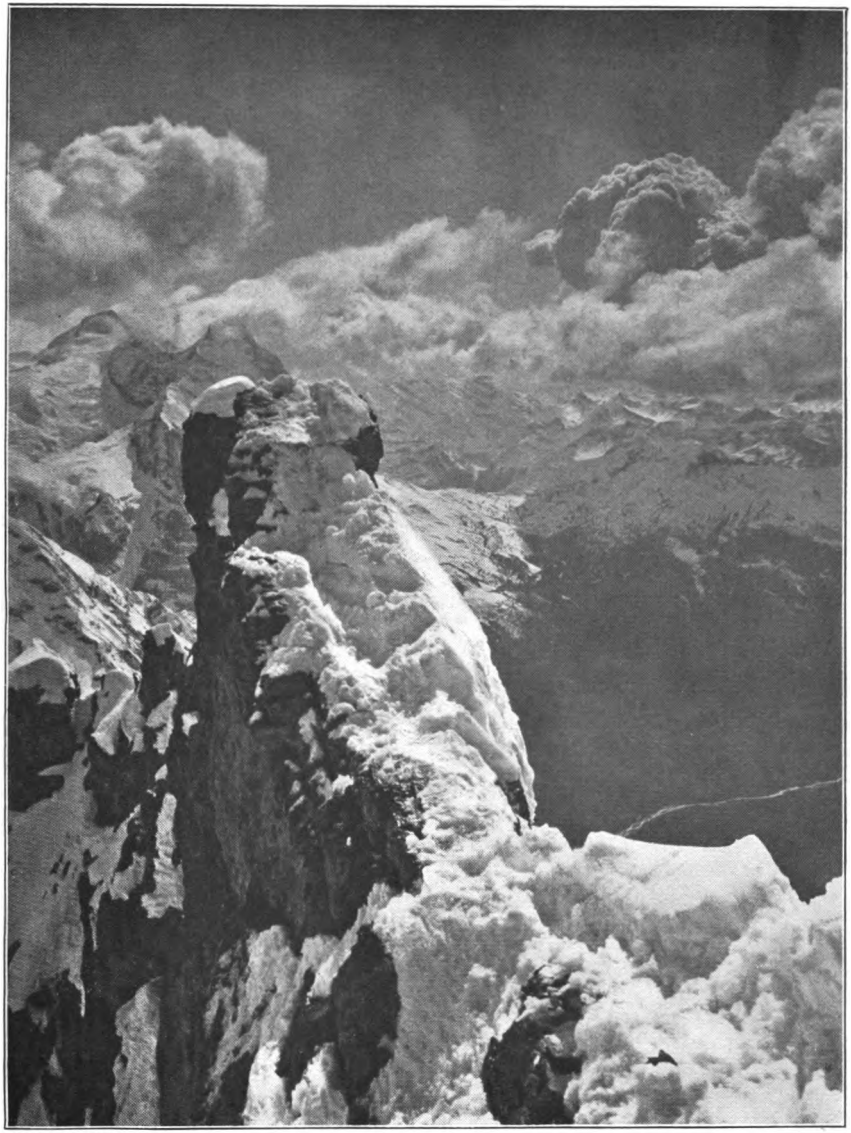


Photo G. Hasler]

SUMMIT OF GRINDELWALD DRU

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above a bank of cloud and in the foreground the corner of a mountain slope on which haymakers are resting from their labours in attitudes of picturesque repose: altogether a most natural and happily grouped composition. Another exhibit, 'The Lauterbrunnen Breithorn from below the Schilthorn,' was more than a mere photograph, making a really charming picture with the straggling flock of sheep wandering across a grass slope in the foreground.

Mr. Sydney Spencer's Swiss Alpine pictures displayed that skill and effectiveness which we have learned to look for from him in the highest degree. The Grandes Jorasses from the Tour Noir was an imposing prospect, and even more so was the splendid panorama from the Büttlassen, so striking a feature of a former exhibition, with its wonderful combination of softness, dignity, and clearness of detail.

The Canadian Alpine regions have seldom been more effectively represented than at this exhibition. To the President we were indebted especially for a very beautiful sunset scene on the Yellowhead Pass and a splendid waterfall on Mount Robson, both most artistically rendered. Mr. Julian Osler exhibited an interesting series of autochrome slides, besides three enlargements, of which the best was 'The Valley of the Ten Peaks,' where the great torrent contrasted finely with the ghostly forms of the distant heights.

Mr. Mumm, who must now possess a very fine and comprehensive collection of photographs of the Canadian Rockies, contributed seven pictures of this region, all of very high quality. We liked best 'Howse Peak,' the fine view of Mount Pilkington, and 'Mount Eon &c. (Assiniboine Group).'

Turning from the New World to the 'immemorial East,' Japan claimed more attention than usual. Mr. Spencer seemed unfortunate in his weather conditions, or he would have produced worthy rivals to the splendid pictures such as Mr. Ponting sent to a former exhibition. We were most struck by his view of 'Fuji from Lake Shōji,' but this famous mountain is a notoriously difficult subject in the heat and haze of a nearly tropical summer sun.

Mr. Weston sent a small study, 'The Norokawa Valley in the Southern Japanese Alps,' giving a very characteristic impression of that interesting country. Mrs. Weston also showed a small coloured view of Fuji by a Japanese gentleman, Mr. N. Gwahō, which attracted attention. It was considerably touched up, but it was very skilfully done in the manner which seems to be a secret of that clever people, and in this case it was justified by the result, which gave us a very charming picture conveying at first sight the impression of a water-colour.

The Club has for so long gratefully accepted and taken for granted Mr. Spencer's unique services in arranging these exhibitions during so many years, that few members probably realise how much patience, diligence, and organising ability are called for to ensure the unqualified success he has never failed to attain.

To him once more there is offered our best thanks for his kindness: our gratitude is unbounded.

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PROCEEDINGS OF THE ALPINE CLUB.

THE ANNUAL GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, W. 1, on Monday, December 6, 1920, at 8.30 P.M., Professor J. Norman Collie, LL.D., F.R.S., *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, Mr. A. L. Bill, Mr. H. J. H. Irish, Mr. W. C. Milroy, M.D., and Mr. H. F. Wright.

The PRESIDENT, in accordance with the provisions of Rule 29, there being no other candidates, declared the following members nominated by the Committee to be duly elected as Officers of the Club and Members of Committee for 1921.

As President: Professor J. Norman Collie, LL.D., F.R.S.

As Vice-Presidents: Mr. A. L. Mumm, and, in place of Mr. C. H. R. Wollaston, whose term of office expires, Mr. Godfrey A. Solly.

As Honorary Secretary: Mr. J. E. C. Eaton.

As Members of Committee: Professor E. J. Garwood, F.R.S., Mr. R. L. G. Irving, the Rev. Walter Weston, Mr. R. P. Bicknell, Major M. G. Bradley, Captain E. V. Slater, Colonel the Hon. C. G. Bruce, C.B., M.V.O., Mr. G. E. Howard, and Mr. L. G. Shadbolt—the last three named in the places of Captain S. L. Courtauld, Lieut.-Colonel W. G. Johns, D.S.O., and Mr. H. F. Montagnier, who retire by effluxion of time.

It was proposed and seconded that Messrs. R. S. Morrish and Reginald Graham be elected Auditors to audit the Club accounts for the current year. This was carried unanimously.

The PRESIDENT said:—We have all heard with considerable regret of the death of Mr. E. A. Broome. He was a very old Member of the Club, and was elected in 1889. He served on the Committee in 1900 and was elected Vice-President of the Club in 1912. Mr. Broome was one of those people who have a most extraordinary love of the mountains, a man full of energy and spirit, and a great climber. His death has meant a great loss to the Club. I have only occasionally met him in the Alps, and for that reason I will call upon other members who were far more intimately acquainted with him to say a few words to us. First of all, I should like to read to you a letter I have received from one of his oldest friends, Mr. John J. Withers, who writes:

'MY DEAR PRESIDENT,—

'I had hoped to be present to-night at the General Meeting to say a few words, as you kindly suggested I might, in memory of our valiant old friend Broome. I find, however, unexpectedly, that I must be in Cambridge, so, if you will allow me, I will write a few words instead.

'About Broome's fine climbing feats, others, more expert than

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I, will speak. Of the man himself, one of my closest friends for many years, my appreciation, I am sure, is warranted.

'Broome had to an extraordinary degree two attributes—love of the mountains and affection for his friends. His love for the Alps was the ruling passion of his life. Not only did he delight in climbing them, but everything and everybody connected with them were a joy to him—the guides, the inns, the innkeepers, the village characters. During the winter nothing pleased him more than to gather round his hospitable board a few Alpine friends, to climb his peaks again, praise the daring or skill of some favourite guide, and denounce with Biblical eloquence but with chivalrous anonymity the ancestry and descendants of any clumsy mortal who had been unfortunate enough to send a stone down on him. Memories led to anticipations, and he would plan over and over again the campaign of the coming year, and often in more recent years a lightning trip to the Pyrenees or the Italian valleys in the spring.

'Every mountain inn he had visited was recalled as his home, and everyone who had associated with him there—waiters, waitresses, and porters—were remembered as faithful members of his own household. As he loved, so he hated, and it was a sorry day for any innkeeper or guide who played a trick on him. He never forgot it, and took good care none of his friends did either. Such treachery ate into his soul.

'His friends were mostly from the hunting-field or mountain, and were innumerable. He did not make them rashly or easily, but "their adoption tried," he grappled them to his heart with hoops of steel. He loved to be with them to hear of their doings and tell them of his. Their welfare was a continual care to him, and any misfortune to them was a blow to him. This loyalty was unbounded, and woe to anyone who in his hearing spoke a disparaging remark about anyone of them. So, too, he expected from them an unvarying loyalty, and an apparent lapse from his high ideal was a terrible blow.

'The fine old warrior has passed away and lies among the great peaks, "felix opportunitate mortis." It was sad indeed during the last weeks of his life to see that indomitable spirit clothed in its feeble body. It is contrary to the nature of things that such force and energy has come to an end. Where two or three are gathered together in praise of the mountains, there will his spirit be also.

'I am, my dear President,

'Yours truly,

(sgd.) JOHN J. WITHERS.'

Sir EDWARD DAVIDSON said:—Mr. President, I am very much obliged to you for giving me an opportunity of paying a small tribute to my old friend Mr. Edward Broome. I wish to associate myself with all you have so well said and with all that Mr. Withers

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has so well written. As a mountaineer I have known Mr. Broome since 1889, in which year he was elected to the Club. On the first occasion that I met him he was crossing the Matterhorn from Breuil in that year with a large party of friends, but in very indifferent weather, and from that time on we have met in many parts of the Alps year after year. This is not the time to descant in detail on Broome's very remarkable climbing achievements. Originally he was perhaps inclined to be a 'centrist' (to use Sir Martin Conway's expression), but later on he became a cosmopolitan climber and explored the Alps from end to end, from Dauphiné to the Dolomites. He had, in especially, a 'penchant' for following up difficult routes which had been done only once or twice, such as the Col du Mont Dolent, the Col des Grandes Jorasses, and so on. But his energies were not confined to mountaineering, for he was a many-sided man in every way. He was a familiar figure in the hunting-field, and he was also well known in musical circles. I believe that at one of the 'Three-Choir' Festivals, owing to the non-appearance through sudden illness of the professional soloist, he was called upon at very short notice to sing the whole of the baritone part in the oratorio 'Elijah,' which he did with great success. He was a Justice of the Peace and Deputy-Lieutenant for Worcestershire, and took an active part in county business. He was one of the shareholders' auditors of the accounts of the Great Western Railway Company.

But I especially desire now to express my own personal tribute to Mr. Broome, as I had the great good fortune during my term of office as President of the Club to be associated with him, first as junior, and then as senior, Vice-President. He was a real support, and the assistance he gave at all times was invaluable. He was ever ready to step into the breach if occasion arose, and he was always loyalty itself. I cannot help feeling that the Club, as well as myself, owes him a great debt of gratitude for all that he did at that time.

At the end, he had the good fortune to be surrounded by most of his nearest relatives and by many Alpine friends. He passed away under the shadow of the peaks he loved, and he was carried to his rest by the chief guides of the Zermatt valley, which in life had been his familiar and happy hunting-ground. Had the choice rested with him, I feel sure he would have so chosen. Mr. Withers has said of him that he was 'felix opportunitate mortis'; may I add 'Requiescat in pace.'

The Right Hon. Lord Sterndale said:—I should like, if I may, to say a few words about Mr. Broome, and my excuse for saying anything to-night must be that I had the advantage of being associated with him during the first year of my term of office as President. He was then senior Vice-President, and I received a support and assistance from him equal to that of which Sir Edward Davidson has spoken. Although I was never on a mountain with him, I often met him in the Alps, and I shall miss him much if I ever

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go there again. He was a man whose good qualities impressed themselves on his friends in increasing degree, the better he was known.

It is not necessary for me to add anything as to his climbing career. It was long and distinguished and continued almost to his death. I met him last year at Chamonix, and I think it was becoming apparent even to him that his strength was no longer equal to the efforts he wished to make.

Whether his life would have been longer if he had taken things more easily I do not know, but I do not think that he would have wished it. A life of enforced idleness as an invalid would have been unbearable to him. I think he died as he would have wished—amongst the mountains—and almost without having ceased to be an active mountaineer. He was a good sportsman and a good friend, and those who knew him best will feel his loss the most.

The PRESIDENT said:—Another member whose loss we deplore is Mr. Reginald Farrer. He was a true lover of the mountains and a great botanist. He had made many journeys in the western parts of China where mainly unexplored and wild mountainous country is to be found. He died this summer in Burmah, and his death has caused a great void in the Club.

With great regret I have also to announce to you the deaths of two other old Members of the Club, namely, Mr. William Asbury Greene, and Sir William Abney, K.C.B., R.E., F.R.S.

Mr. William Asbury Greene was elected in 1880, and he died on November 7 last.

Sir William Abney was elected in 1877, and he died on December 3. He was well known as a pioneer worker in the field of photographic science. He entered the Royal Engineers at the age of seventeen, and retired in 1881. He was elected a Fellow of the Royal Society in 1876, served as President of both the Royal Astronomical and the Physical Societies, and in 1905 he was elected a Vice-President of the Royal Institution.

The PRESIDENT brought to the notice of Members various details connected with the Winter Dinner.

A vote of thanks to Mr. Sydney Spencer for his work in connexion with the Photographic Exhibition was heartily acclaimed.

Mr. N. E. ODELL then read a Paper entitled 'Successes and Failures in 1920,' which was illustrated by lantern slides.

The PRESIDENT said:—The description of the climbs made by Mr. Odell and his companions makes one feel as if one would like to get out there at once. Undoubtedly the Mont Blanc region is one which cannot be bettered for all-round climbing, and I believe there are still some routes there which remain to be discovered. The ridge climbed by Mr. Odell on the Aiguille Verte seems to have bristled with difficulties, and to get to the top by that route would have been a great performance. The only wonder is that he got as far as he did, and I think he is to be congratulated on his attempt. I now ask you to pass a very hearty vote of thanks to him for his Paper and for the very fine slides he has shown us.

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The vote of thanks to Mr. Odell was carried with great acclamation, and the proceedings terminated.

THE ANNUAL PHOTOGRAPHIC EXHIBITION was held in the Hall of the Club from Wednesday, December 1, to Wednesday, December 15. In connexion with the Exhibition an 'At Home' was held on Monday, December 6, when some 400 persons, Members and their friends, attended.

THE ANNUAL WINTER DINNER was held in the King's Hall of the Holborn Restaurant on Tuesday, December 7, 1920, at 7 P.M., Professor J. Norman Collie, LL.D., F.R.S., *President*, in the Chair. There were present 264 Members and their guests, among the latter being Sir Hercules Read, LL.D., Mr. Harold Cox, the Right Rev. Bishop Gore, D.D., and the Right Hon. Sir Gordon Hewart, K.C., M.P., Attorney-General. The usual toasts were given.

A GENERAL MEETING of the Club was held in the Hall, 23 Savile Row, London, W. 1, on Tuesday, February 1, 1921, at 8.30 P.M., Professor J. Norman Collie, F.R.S., *President*, in the Chair.

The following candidates were balloted for and elected Members of the Club, namely, Mr. Henry Baldwin de Villiers-Schwab, Mr. Robert Alexander Frazer, Dr. Nils Backer Gröndahl, the Rev. Canon Joseph Henry Kidd, Mr. Theodore Howard Somervell, F.R.C.S., and Mr. Ralph Forester Stobart.

The PRESIDENT said:—With great regret I have to announce the death of Mr. G. F. Turner, who was elected in 1901. He died in December last.

Another loss to the Club has been caused by the death of Mr. F. W. Bourdillon, who was elected in 1900. He died a fortnight ago. He was a man of very considerable literary tastes, and published several books of poems. Besides being a poet he was well read in the very old French romances. He was a great lover of Switzerland, and he has occasionally read to us some very charming Papers. To his old friends and to all those who knew him his death will mean a very great loss.

Mr. Fitzgerald Whelan, who was elected in 1902, died at the end of last year. I believe Dr. E. H. Stevens knew him well, and I am sure we should all be glad to hear a few words from him. (Dr. Stevens' remarks are reported as an 'In Memoriam' notice.)

Most of the Members have no doubt seen the notices in the Public Press concerning the expedition to Spitzbergen which is now being organised by Oxford University. I have been asked to state that besides the topographical and mountaineering section, of which Mr. N. E. Odell, our member, is to be the leader, there will also be a zoological section attached to this expedition. The last British party went there in 1907, and although they accomplished a great amount of most useful work, there still remains much to be done in order to supplement our knowledge of that land. I understand that they are greatly in need of funds in order to place the expedition

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on a sound financial basis, and that subscriptions from any of the Members of this Club would be greatly appreciated. The printed circular on the Notice Board will give you any further particulars that you may require.

I announce with pleasure that Mr. Albert Ball, son of the late John Ball, our first President, has presented to the Library a number of books and pamphlets from his late father's library. The Hon. Librarian has expressed to Mr. Ball our grateful thanks for his gift.

Our congratulations are due and are heartily accorded to Chevalier Victor de Cessole, who has recently been created a Chevalier de la Légion d'Honneur.

Mount Everest Expedition.—The PRESIDENT gave a short exposition of the negotiations leading up to the formation of the Joint Committee which is now considering the question of ways and means for the ascent of Mount Everest. He stated that he received information in December last from Sir Francis Younghusband that the Dalai Lama had promised facilities to an expedition passing through Tibet, and that he (Sir Francis Younghusband), desired to form a Committee of Members of the R.G.S. and of the A.C. to go into the question. The necessity of immediate action being imperative, the President had on his own initiative called together the following Members of the A.C. to sit on this Joint Committee, viz., Captain J. P. Farrar and Mr. C. F. Meade, himself and the Hon. Secretary, Mr. J. E. C. Eaton, sitting as members *ex-officio*. The Members of the Joint Committee representing the R.G.S. were Sir Francis Younghusband, Colonel Jack, Mr. Somers Cocks, and Mr. Arthur R. Hinks. A number of meetings had already been held and considerable progress had been made. The Joint Committee had decided that Mr. Harold Raeburn should be sent out this year in charge of the actual mountaineering party. Mr. Raeburn hoped to leave England some time in March, in advance of the expedition which is expected to cross into Tibet about May, and to reach the neighbourhood of Mt. Everest some time in June. Funds are needed for the financing of the expedition, and a circular will be sent out to Members as soon as possible, setting out the objects, aims, and needs in connexion with this project. As stated, the President had hitherto acted on his own initiative, and what he now desired was that the Club should ratify and confirm the action he had taken in this matter, so that the Club may be identified with the work in hand. The President emphasised the fact that the Alpine Club was not committed to financial liabilities of any kind.

Sir ALEXANDER KENNEDY thereupon moved that the thanks of the Members be accorded the President for the energetic and timely action he had taken with regard to the work of organising this expedition, and that his action be confirmed by the Members present.

Sir EDWARD DAVIDSON seconded, and on being put to the meeting the motion was carried *nem. con.*

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Sir FRANCIS YOUNGHUSBAND thanked the members for thus identifying themselves officially with the R.G.S., and said that the great success they had achieved in getting permission from the Dalai Lama to proceed through Tibet was due to Colonel Howard Bury.

The PRESIDENT said:—Members will be glad to hear that His Serene Highness The Prince of Monaco has accepted Honorary Membership of the Club.

Mr. RAYMOND BICKNELL then read a Paper on 'Mont Dolent from the Glacier d'Argentière and the Col des Grandes Jorasses,' which was illustrated by lantern slides.

Comments on the Paper followed, Mr. HUGH E. M. STUTFIELD remarking that he had never listened to a more lucid description of actual climbing. The proceedings terminated with a very hearty vote of thanks to Mr. Bicknell, which was carried with great acclamation.

THE EVEREST EXPEDITION.

Captain Finch was, at the last moment, declared medically unfit for this year's expedition. A renewed attempt, unfortunately unavailing, was made to secure Mr. Ling's co-operation, which Mr. Raeburn had always been anxious to have.

It is much to be regretted that the great experience and never-failing infectious bonhomie of the Scottish President were not available for the expedition, while the varied experience of Captain Finch, especially as a winter mountaineer and expert skieur, his proved powers of leadership on the most difficult and arduous expeditions, his scientific knowledge and great skill in mountain photography are a further loss.

Finally, on the proposal of Mr. Mallory, supported by a letter from Mr. Irving, Mr. G. Bullock was adopted as a member of the expedition.

It should be understood that, in the early stage, inquiries were made of several well-known mountaineers as to joining the expedition. It is, however, possible to few men, at short notice, to arrange to be absent from England for seven or eight months.

CORRIGENDA.—'A.J.' vol. xxxii. (*v.* also p. 273), p. 367, line 18 from bottom, *read* '*Mr.* F. O. Wethered.' Mr. Wethered is a cousin of our very splendid veteran, the late F. T. Wethered. He rowed No. 6 in the Oxford boat in the 1885, 1886, and 1887 Inter-University races, and was formerly a member of the A.C.

P. 386, *for* 'about' *read* 'above.'

END OF VOLUME XXXIII.

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